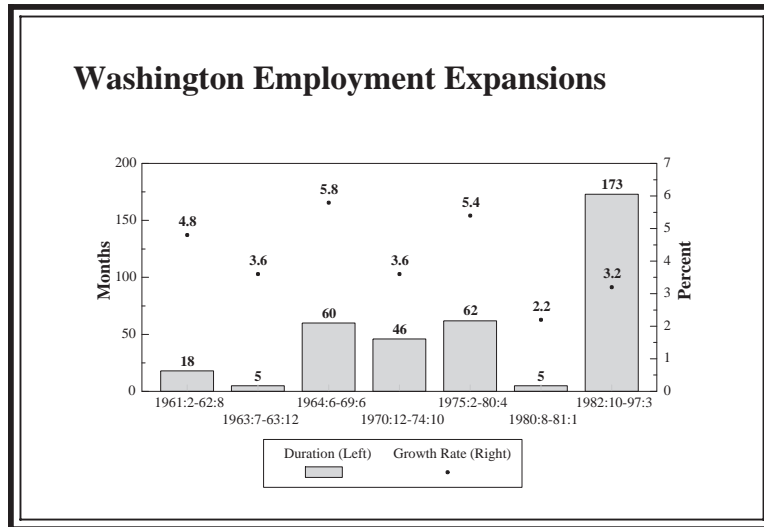


# Washington Economic and Revenue Forecast



March 1997  
Volume XX, No. 1

## **Economic and Revenue Forecast Council Members**

Senator Sid Snyder, Chair  
Senator Dan McDonald  
Representative Hans Dunshee

Representative Brian Thomas  
Frederick C. Kiga, Director, DOR  
Dick Thompson, Director, OFM

## **Governor's Council of Economic Advisors**

Mr. Rick Bender  
Dr. Richard Conway  
Mr. Mark Endresen  
Mr. John Griffiths  
Mr. Douglas Ljungren  
Dr. Lynn Michaelis

Dr. Desmond O'Rourke  
Mr. Douglas H. Pedersen  
Dr. Kriss Sjoblom  
Dr. Paul Sommers  
Mr. Stephen Stockett  
Mr. William Whitlow

---

### **Explanation of the Cover Graph**

The cover chart contrasts the current economic expansion in Washington State employment with the previous five business cycle upturns. Having skipped the 1990-91 U.S. recession, the current expansion in Washington is already a record 173 months old. If, as is expected in this forecast, a recession is avoided through 1999, this expansion will have lasted more than 17 years. While this expansion has proved remarkably durable, it has also been less robust than previous cycles. The average annual rate of growth during the current expansion of 3.2 percent is lower than in any of the previous cycles with the exception of the aborted 1980-81 recovery. The forecast assumes a healthy 2.6 percent growth rate from now through 1999.

**This publication is available electronically at <http://www.wa.gov/ofc>**

# **Washington Economic and Revenue Forecast**

Prepared by the  
Office of the Forecast Council

March 1997  
Volumne XX, No. 1

# Preface

The Office of the Forecast Council is required by Chapter 231, Section 34, Laws of 1992 (RCW 82.33.020) to prepare a quarterly state economic and revenue forecast and submit it to the Forecast Council. This report presents the state's economic and General Fund-State revenue forecast. It is issued four times a year.

Copies are available to Washington State businesses and residents for \$4.50 per copy, and to those out-of-state for \$9.00 per copy. You may contact our office for more subscription information at (360) 586-6785 or by writing the Office of the Forecast Council, Post Office Box 40912, Olympia, WA. 98504-0912.

You may also access this report on our website at [www.wa.gov/ofc](http://www.wa.gov/ofc).

# Table of Contents

<b>Preface</b>	<b>iii</b>
<b>List of Tables</b>	<b>vii</b>
<b>List of Charts</b>	<b>ix</b>
 <b>Executive Summary</b>	 <b>xiii</b>
 <b>Chapter 1</b>	
<b>Washington State and U.S. Economic Forecasts</b>	
Recent U.S. Economic Activity	1
U.S. Forecast Highlights	2
Recent Washington Economic Activity	3
Adjustments to Economic Data	4
Washington Forecast Highlights	4
Alternative Forecasts	6
Governor's Council of Economic Advisors	7
 <b>Chapter 2</b>	
<b>Washington Business Indicators</b>	
National News	19
State News	19
 <b>Chapter 3</b>	
<b>Washington State Revenue Forecast Summary</b>	
Forecast Summary	27
Background and Assumptions	27
March 1997 Forecast Assumptions	28
Recent Collection Experience	30
1995-97 and 1997-99 Biennia Forecasts	32
Track Record for the 1995-97 & 1997-99 Biennia	40
Relationship Between Cash and GAAP General	47
Fund-Revenue Forecasts	
Tuition Forecast	52
Alternative Forecasts	52

## **Special Report: Chapter 4**

### **Why is Washington's Unemployment Rate So High?**

Introduction	57
Part 1. The Anomaly	58
Part 2. Two Different Unemployment Rates	59
Part 3. Background on Washington's Unemployment Insurance System	61
Part 4. Benefits in Washington are Among the Best	62
Part 5. What the Research Says	65
Part 6. A Lack of Plausible Alternatives	65
Part 7. The Anomaly Explained	70
Part 8. An Unpleasant Tradeoff	70
Part 9. Concluding Comments	70
References	71

## **Special Report: Chapter 5**

### **Washington and U.S. Per Capita Income Growth**

Industry Mix	74
Differential Regional Earnings	74
Job Ratio	75
Per Capita Non-Earnings Personal Income	75
Component Contributions to Per Capita Income Growth	75
Washington's Rank	76
The Problem of Cross-Border Commuting	77
The Outlook for Washington Per Capita Income	78

## **Appendices**

### **Detail Components of the Washington Economic Forecast**

Summary Tables	91
Nonagricultural Employment by Industry	99
Nonagricultural Employment by Industry	
Historical Data	107
Personal Income by Component	110
Personal Income by Component	
Historical Data	118
Selected Inflation Indicators	121
Chain-Weighted Price Indices	122
Total Resident Population	123
Washington Population	124
Glossary	125

# List of Tables

## Chapter 1 Washington State and U.S. Economic Forecasts

Table 1.1	U.S. Economic Forecast Summary	8
Table 1.2	Washington Economic Forecast Summary	9
Table 1.3	Comparison of Alternative Forecasts	10
Table 1.4	Forecast Analysis	11
Table 1.5	Forecast Comparison	12
Table 1.6	Long Range Economic Outlook	13

## Chapter 2 Washington Business Indicators

Table 2.1	Business Indicators Historical Data	25
-----------	-------------------------------------	----

## Chapter 3 Washington State Revenue Forecast Summary

Table 3.1	March 1997 Change to General Fund State Forecast 1995-1997 and 1997-99 Biennia	27
Table 3.2	Economic and Revenue Flow Table	29
Table 3.3	Collection Variance, November 11 - March 10, 1997	31
Table 3.4	General Fund State Collections, Historical	33
Table 3.5	Taxable Retail Sales, March 1997	39
Table 3.6	Summary of Changes to General Fund-State Forecast	40
Table 3.7	General Fund-State Forecast by Agency: Cash Basis, 1995-97 Biennium	42
Table 3.8	General Fund-State Forecast by Agency: GAAP Basis, 1995-97 Biennium	43
Table 3.9	General Fund-State Forecast by Agency: Cash Basis, 1997-99 Biennium	44
Table 3.10	General Fund-State Forecast by Agency: GAAP Basis, 1997-99 Biennium	45
Table 3.11	General-Fund State Forecast by Fiscal Year	46
Table 3.12	Track Record for the 1995-97 Biennium	48
Table 3.13	Track Record for the 1997-99 Biennium	49
Table 3.14	March 1997 Baseline Forecast by Agency	50
Table 3.15	Resources, Expenditures and Reserves	51

### **Chapter 3 (continued)**

#### **Washington State Revenue Forecast Summary**

Table 3.16	Higher Education Tuition Forecast	53
Table 3.17	March 1997 Alternative Forecasts, 1995-97 Biennium	55
Table 3.18	March 1997 Alternative Forecast, 1997-1999 Biennium	56

### **Special Report: Chapter 4**

#### **Why is Washington's Unemployment Rate So High?**

Table 4.1	Weekly State Benefit Amount for Various Workers	63
Table 4.2	Average Tax Rates, Duration, Benefits Per Capita	64
Table 4.3	Employment and Unemployment Seasonality	69

### **Special Report: Chapter 5**

#### **Washington and U.S. Per Capita Income Growth**

Table 5.1	Component Contributions to Relative Per Capita Income	84
Table 5.2	Impact of Cross-Border Commuting	86

### **Appendices**

#### **Detail Components of the Washington Economic Forecast**

Table A1.1	U.S. Economic Forecast Summary	91
Table A1.3	Washington Economic Forecast Summary	95
Table A2.1	U.S. Nonagricultural Employment by Industry	99
Table A2.3	Washington Nonagricultural Employment by Industry	103
Table A2.5	Washington Nonagricultural Employment by Industry Historical Data	107
Table A3.1	U.S. Personal Income by Component	110
Table A3.3	Washington Personal Income by Component	114
Table A3.5	Washington Personal Income by Component Historical Data	118
Table A4.1	Selected Inflation Indicators	121
Table A4.2	Chain-Weighted Price Indices	122
Table A5.1	Total Resident Population and Components of Change	123
Table A5.2	Washington Population	124



# List of Charts

## Chapter 1

### Washington State and U.S. Economic Forecast

#### Comparison of Washington and U.S. Economic Forecasts

Chart 1.1	Total Nonagricultural Employment	14
Chart 1.2	Manufacturing Employment	14
Chart 1.3	Aerospace Employment	14
Chart 1.4	Forest Products Employment	14
Chart 1.5	Construction Employment	15
Chart 1.6	Trade Employment	15
Chart 1.7	Services Employment	15
Chart 1.8	Government Employment	15
Chart 1.9	Real Personal Income	16
Chart 1.10	Consumer Price Indices	16
Chart 1.11	Population	16
Chart 1.12	Per Capita Housing Units	16

#### Comparison of Alternative Forecasts

Chart 1.13	Real GDP	17
Chart 1.14	Implicit Price Deflator	17
Chart 1.15	Mortgage Rate	17
Chart 1.16	Three Month T-Bill Rate	17

#### Comparison of Alternative Washington Forecast

Chart 1.17	Personal Income	18
Chart 1.18	Real Personal Income	18
Chart 1.19	Nonagricultural Employment	18
Chart 1.20	Housing Permits	18

## Chapter 2

### Washington Business Indicators

#### Key Economic Indicators

Chart 2.1	Annual Employment Growth in Washington and the U.S.	21
Chart 2.2	Aerospace Employment	21
Chart 2.3	Unemployment Rate	21
Chart 2.4	Washington Boom Monitor	21
Chart 2.5	Washington and U.S. Indexes of Leading Indicators	22
Chart 2.6	Initial Claims for State Unemployment Insurance	22
Chart 2.7	Seattle Times and U.S Help-Wanted Indexes	22

## **Chapter 2 (continued)**

### **Washington Business Indicators**

#### **Washington State Leading Indicators**

Chart 2.8	Housing Units Authorized in Washington State	22
-----------	--	----

#### **Other State Economic Indicators**

Chart 2.9	Average Weekly Hours in Manufacturing	23
Chart 2.10	Out-of-State Drivers Moving into Washington	23
Chart 2.11	New Car and Truck Sales	23
Chart 2.12	Purchasing Management Composite Index	23

#### **Other Economic Indicators**

Chart 2.13	Quarterly U.S. GDP Growth	24
Chart 2.14	Inflation (CPI)	24
Chart 2.15	U.S. Economic Indicators	24
Chart 2.16	Employment Growth in Metropolitan Areas	24

## **Chapter 3**

### **Washington State Revenue Forecast**

Chart 3.1	General Fund-State Revenue	34
Chart 3.2	General Fund-State Revenue Percent Change	34
Chart 3.3	Composition of General Fund-State Revenue	35
Chart 3.4	Taxable Sales as a Percent of Personal Income	35

## **Special Report: Chapter 4**

### **Why Is Washington Unemployment Rate So High?**

Chart 4.1	Insured and Unemployed Uninsured Rates	59
Chart 4.2	Insured Unemployment Rates	60
Chart 4.3	Unemployment Rates	60
Chart 4.4	Unemployment Rates for Covered Workers	60
Chart 4.5	Unemployment Rates for Uncovered Workers	60
Chart 4.6	Insured Unemployment Rates in Washington and the U.S.	67
Chart 4.7	1995 Seasonal Factors for Unemployment	68

## **Special Report: Chapter 5**

### **Washington and U.S. Per Capita Income Growth**

#### **U.S. and Washington Per Capita Income**

Chart 5.1	Real Per Capita Income	80
Chart 5.2	Relative Per Capita Income Growth	80

#### **Determinants of Relative Per Capita Income**

Chart 5.3	Industry Mix	81
Chart 5.4	Differential Regional Earnings	81
Chart 5.5	Job Ratio	81
Chart 5.6	Per Capita Non-Earnings Income	81

## **Special Report: Chapter 5 (continued)**

### **Washington and U.S. Per Capita Income Growth**

#### **Component Contributions to Relative Per Capita Income Growth**

Chart 5.7	Industry Mix	82
Chart 5.8	Differential Regional Earnings	82
Chart 5.9	Job Ratio	82
Chart 5.10	Per Capita Non-Earnings Income	82

#### **U.S. and Washington Per Capita Income Forecast**

Chart 5.11	Real Per Capita Income	83
Chart 5.12	Component Contributions to Relative Per Capita Income Growth	83

## Executive Summary

The economic and revenue outlook has changed little since November 1996. As in November, the forecast anticipates a continued but moderate U.S. economic expansion. Real GDP growth accelerated to 4.7 percent in the fourth quarter from 2.1 percent in the third quarter. The GDP growth rate for all four quarters of 1996 was 3.4 percent which is higher than the long term potential of the economy. As a result, the nation's unemployment rate continued to decline in 1996 and wage inflation began to accelerate. The low inflation of benefits costs helped hold down the increase in total compensation, but this trend is not expected to continue. The forecast assumes that the Fed will nudge the federal funds rate higher from the current rate of 5.25 percent to 5.75 percent by the fourth quarter of 1997. While the Fed action is designed to allow only moderate growth in the coming years, the unemployment rate will remain below the level consistent with stable inflation. As a result, both wage and price inflation are expected to drift higher. The forecast calls for real GDP (1992 chain weight basis) to grow 2.9 percent in 1997, slowing to 2.1 percent per year in 1998 and 1999. Inflation, as measured by the implicit price deflator for personal consumption expenditures (1992 chain weight basis) rose only 2.1 percent in 1996, the smallest increase since 1965. Inflation is expected to increase to 2.2 percent in 1997, 2.6 percent in 1998, and 2.8 percent in 1999.

The March 1997 Washington State economic forecast is also very similar to the November 1996 forecast. The forecast continues to expect the Washington economy to outperform the nation throughout the forecast. After a decline of 37,700 since the first quarter of 1990 Washington aerospace employment reached a turning point in the fourth quarter of 1995. Aerospace employment increased 14,900 during the four quarters of 1996 and is expected to increase another 11,900 by the end of 1999. If so, the cumulative employment growth since the fourth quarter of 1995 will reach 26,700 by the fourth quarter of 1999. The electrical machinery employment forecast retains the assumption that Intel will add 1,000 employees per year through 1999 in conjunction with its new plant in DuPont and Hanford related employment is still expected to decline 800 during 1997. Washington's wage and salary employment growth is expected to improve to 3.0 percent in 1997 following a 2.8 percent increase in 1996. Employment growth is expected to slow in the final two years of the forecast, however, as the U.S. economy cools and the aerospace expansion tapers off. The forecast expects an employment increase of 2.7 percent in 1998 and 2.4 percent in 1999. Washington personal income growth should remain strong at 6.5 percent in 1997 following an equivalent increase in 1996. Washington personal income growth is expected to slow slightly to 5.9 percent per year in 1998 and 1999. Housing permits are expected to increase modestly from 42,400 in 1996 to 43,600 in 1997. The forecast expects single family activity to slow as a result of higher mortgage interest rates but the multi-family sector will gain strength as net immigration increases. The net

result is little change in the total which is expected to dip to 43,500 in 1998, rising to 44,500 in 1999.

The March 1997 General Fund-State revenue forecast for the 1995-97 biennium is \$17,552.6 million. This represents a \$38.1 million reduction from the November 1996 forecast. The General Fund-State forecast for the 1997-99 biennium of \$19,419.6 million is \$14.1 million lower than expected in November. The main reason for the decrease in the revenue forecast is the 4.7 percent reduction in the state property tax for 1997 which reduces revenue by \$32.3 million in the current biennium and by \$26.4 million in the next biennium. Other than legislation, the forecast is \$5.8 million lower in 1995-97 and \$12.3 million higher in 1997-99. Excluding legislation, the revenue forecast for the combined 1995-97 and 1997-99 biennia has been increased by just \$6.5 million.

As required by law, optimistic and pessimistic alternative forecasts were developed for the 1995-97 and 1997-99 biennia. The forecast based on more optimistic economic assumptions netted \$161 million more revenue in the current biennium and \$925 million more in the next biennium. The pessimistic alternative was \$148 million lower in 1995-97 and \$1,088 million lower in 1997-99. An alternative forecast based on the average view of the Governor's Council of Economic Advisors yielded \$10 million more revenue in the 1995-97 biennium and \$97 million more in 1997-99.

# Washington State and U.S. Economic Forecasts

## Recent U.S. Economic Activity

This forecast incorporates the advance GDP estimate for the fourth quarter of 1996. Real GDP growth accelerated to 4.7 percent in the fourth quarter from 2.1 percent in the third quarter. The estimate for final sales growth was an even stronger 4.9 percent as the rate of inventory accumulation slowed slightly. Consumer spending, which accounts for two thirds of GDP, rose at a 3.4 percent rate in the fourth quarter led by a 5.4 percent increase in consumer durables. Consumer spending on nondurable goods rose 1.7 percent in the quarter while purchases of consumer services increased 3.8 percent. Fixed investment rose at a moderate 2.6 percent in the fourth quarter. While nonresidential construction soared at a 22.6 percent rate, investment in producer's durable equipment fell 1.6 percent, the first decline in five years. Fixed residential investment declined at a 1.3 percent rate. The international sector added substantially to real growth in the fourth quarter. While imports increased at a 4.7 percent rate, exports surged 25.5 percent. The growth in exports accounted for more than half the overall GDP growth in the fourth quarter. Government spending increased at a 0.7 percent rate in the fourth quarter as a 2.2 percent increase in state and local spending more than offset a 1.9 percent reduction in federal spending.

The GDP growth rate for all four quarters of 1996 was 3.4 percent which is higher than the long term potential of the economy. As a result, the nation's unemployment rate continued to decline in 1996 and wage inflation began to accelerate. The low inflation of benefits costs helped hold down the increase in total compensation, but this trend is not expected to continue. The forecast assumes that the Fed will nudge the federal funds rate higher from the current rate of 5.25 percent to 5.75 percent by the fourth quarter of 1997. While the Fed action is designed to allow only moderate growth in the coming years, the unemployment rate will remain below the level consistent with stable inflation. As a result, both wage and price inflation are expected to drift higher. The forecast calls for real GDP (1992 chain weight basis) to grow 2.9 percent in 1997, slowing to 2.1 percent per year in 1998 and 1999. Inflation, as measured by the implicit price deflator for personal consumption expenditures (1992 chain weight basis) rose only 2.1 percent in 1996, the smallest increase since 1965. Inflation is expected to increase to 2.2 percent in 1997, 2.6 percent in 1998, and 2.8 percent in 1999.

## U.S. Forecast Highlights

1. Real GDP growth slowed in fiscal 1996 to 1.9 percent (1992 chain weight basis) from 3.1 percent in 1995. The strong GDP growth in the last three quarters should push growth to an unsustainable 3.0 percent in fiscal 1997, however. The forecast assumes that the Fed is again successful in slowing the economy sufficiently to prevent overheating without inducing a recession. GDP growth is expected to slow to 2.4 percent in fiscal 1998 and 2.0 percent in 1999.

2. Inflation, as measured by the implicit price deflator for personal consumption expenditures, dropped to just 2.1 percent (1992 chain weight basis) in fiscal 1996, the lowest level since 1966. Nevertheless, the economy is operating at a higher rate than is consistent with stable inflation. Even with the slower growth expected in the forecast, the economy will remain slightly overheated for several years. As a result, the inflation rate is expected to increase during the forecast to 2.2 percent in fiscal 1997, 2.4 percent in 1998, and 2.7 percent in 1999.

3. Strong real growth and low unemployment have once again led to fears of accelerating inflation. While the resulting increase in inflation has so far been minor, the Fed would clearly like to head off a resurgence in inflation before it becomes severe. The Fed is expected to make a limited “preemptive strike” by raising the federal funds rate from the current rate of 5.25 percent to 5.75 percent by the fourth quarter of 1997. As evidence accumulates that the economy is operating at a more moderate rate, the Fed will begin lowering the funds rate in the second half of 1998. The three month Treasury Bill rate will follow a similar path. The T-bill rate edged down to 5.14 percent in fiscal 1996 and is expected to decline further to 5.06 percent in fiscal 1997. The modest Fed tightening is expected to raise the T-bill rate to 5.42 percent in fiscal 1998 before a more relaxed monetary stance allows the rate to decline to 5.25 percent in 1999. Long term interest rates have already moved higher. The mortgage rate, which averaged 7.60 percent in fiscal 1996, is expected to rise to 7.91 percent in 1997, 8.16 percent in 1998, and 8.24 percent in 1999.

4. Responding to low mortgage interest and strong consumer confidence, housing starts increased 4.5 percent in fiscal 1996 to 1.448 million units. Housing starts have not been this strong since 1989. Higher mortgage rates and lower consumer confidence should produce a declining trend in housing starts, though, which is expected to extend through 1999. Housing starts are expected to slip to 1.430 million units in fiscal 1997, 1.368 million units in 1998, and 1.339 million units in 1999.

5. As a result of a slowdown in the U.S. economic expansion, the nation’s unemployment rate changed little in fiscal 1996, falling to 5.57 percent from 5.69 percent in 1995. With the resumption of strong economic growth, however, the unemployment rate has resumed its downward trend and is expected to average 5.26 percent in fiscal 1997. This should be the bottom in the unemployment rate if the economy slows again as is expected. The unemployment rate is expected to remain at 5.26 percent in fiscal 1998 and to inch up to 5.38 percent in 1999.

6. Thanks to economic growth, discretionary spending cuts, and the 1993 tax increases, the federal budget deficit continued to drop in fiscal 1996 to \$148.7 billion (national income and product accounts basis) from \$178.1 billion in 1995. The cyclical peak in the deficit was \$277.8 percent in fiscal 1993. The improvement should continue this year as the deficit is expected to fall to \$120.4 billion. While discretionary spending will continue to be under pressure, the forecast assumes that the kind of cuts in entitlements that would be necessary to balance the budget are not forthcoming.



Higher interest rates and an expected tax cut are expected to boost the deficit to \$140.1 billion in fiscal 1998 but the deficit is expected to decline again in 1999 to \$124.5 billion.

7. The “soft landing” temporarily slowed the growth of imports. As a result, the trade deficit (national income and product accounts basis) narrowed in fiscal 1996 to \$85.1 billion from \$107.4 billion in 1995. U.S. exports will benefit from rebounding economies in Europe and Japan but the strong dollar will limit the improvement in exports while strong domestic demand will raise imports. The forecast expects the deficit to rise to \$110.4 billion in fiscal 1997 and \$130.5 billion 1998, declining to \$128.0 billion in 1999.

Table 1.1 provides a fiscal year summary of the U.S. economic indicators.

## Recent Washington Economic Activity

The Employment Security Department has released preliminary employment estimates through December 1996. This forecast is based on adjusted employment estimates through December 1996 as described in **Adjustments to Economic Data**. The adjusted employment estimates indicate that Washington’s total nonfarm employment growth slowed to a 2.3 percent annual rate in the fourth quarter of 1996 from 4.4 percent in the third quarter. Employment growth for all four quarters of 1996 averaged 3.8 percent. However, the estimates for 1996 include an upward revision of 9,700 in the estimate for noncovered corporate officers effective in January 1996. The effect of this is to overstate the year over year growth in 1996 by 0.4 percent and the first quarter growth rate by 1.7 percent. Thus, the true growth rate for all four quarters of 1996 was 3.4 percent rather than the official 3.8 percent and the growth rate in the first quarter of 1996 was really 4.5 percent rather than the reported 6.2 percent. Manufacturing employment rose 9,000 in the fourth quarter of 1996 (10.8 percent) following an increase of 7,700 in the third quarter. The aerospace sector alone accounted for 6,900 of the increase in the fourth quarter, growing at a 35.1 percent annual rate. The rest of the manufacturing sector was also strong, however, rising 2,100 for an average annual growth rate of 3.3 percent. Nonmanufacturing employment growth was relatively weak in the fourth quarter, though, increasing at a 0.9 percent annual rate compared to a 3.6 percent rate of increase in the third quarter. Wholesale trade was strong in the quarter (up 6.7 percent) as was transportation, communications, and public utilities employment (up 3.9 percent). Services employment grew at a moderate 1.8 percent as did finance, insurance, and real estate employment. Employment in construction (down 1.7 percent), retail trade (down 0.3 percent), state and local government (down 1.4 percent), and federal government (down 0.8 percent) all registered declines in the fourth quarter.

In January 1997, the U.S. Department of Commerce, Bureau of Economic Analysis (BEA) revised its quarterly state personal income estimates through the second quarter of 1996 and released preliminary estimates for the third quarter. In addition, the wage estimates for the first three quarters of 1996 have been adjusted to reflect wage estimates derived from the Covered Employment and Payrolls data produced by the Employment Security Department (see **Adjustments to Economic Data**). The adjusted third quarter personal income estimate of \$138.880 billion is \$0.436 billion (0.3 percent) higher than expected in the November forecast primarily as a result of a \$0.430 billion (0.6 percent) forecast error in wages and salaries. After adjusting employment for the revision in the corporate officers estimate, the year over year growth rate of nominal average wages in Washington was a strong 4.9 percent in the third quarter. Much of the strength in wage growth is coming from the prepackaged software sector where employment was up 11.5 percent from the previous year and average wages were up 26.7 percent. Excluding software, which comprises less



than 0.1 percent of overall employment, average wages in Washington were up only 4.0 percent. Nonwage sources of personal income were only \$0.006 billion (0.0 percent) higher than expected.

Responding to the increase in mortgage interest rates since early 1996, the number of housing units authorized by building permit declined further in the fourth quarter of 1996 to 40,400. This was the third consecutive decline in housing permits since a peak of 45,600 in the first quarter of 1996. The decline in housing activity has been concentrated almost entirely in the single family market which is more sensitive to mortgage rates than is multi-family housing.

## **Adjustments to Economic Data**

Since the BEA will eventually benchmark its 1996 wage and salary estimates to the covered employment and payrolls data for all sectors except agriculture and federal government, the wage estimates for the first three quarters of 1996 have been adjusted to reflect the year over year wage growth indicated by the covered employment and payrolls data. This adjustment reduced the third quarter wage estimate by \$0.107 billion (0.1 percent). Unadjusted BEA estimates were used for farm, federal civilian, and military wages as well as for all nonwage components of personal income.

This forecast utilizes an alternative employment estimate developed by the Department of Employment Security and the Office of the Forecast Council. The alternative employment estimate incorporates the covered employment and payrolls data through the third quarter of 1996 which adds 3,900 (0.2 percent) to estimate for September. In addition, the growth pattern from September 1996 through December 1996 has been adjusted to reflect the average revision between the preliminary, sample based estimates and the final, covered employment and payrolls based estimates which adds 1,400 (0.1 percent) to the employment growth during these months. The effect of both these adjustments is to raise the December employment estimate by 5,300 (0.2 percent).

## **Washington State Forecast Highlights**

After a decline of 37,700 since the first quarter of 1990 (excluding the impact of the Boeing strike) Washington aerospace employment reached a turning point in the fourth quarter of 1995. Aerospace employment increased 14,900 during the four quarters of 1996 and is expected to increase another 11,900 by the end of 1999. If so, the cumulative employment growth since the fourth quarter of 1995 will reach 26,700 by the fourth quarter of 1999. To put this in perspective, however, the aerospace expansion of the 1980's added 55,200 aerospace jobs. The electrical machinery employment forecast retains the assumption that Intel will add 1,000 employees per year through 1999 in conjunction with its new plant in DuPont and Hanford related employment is still expected to decline 800 during 1997.

1. Real personal income growth increased to 4.0 percent in fiscal 1996 from 3.2 percent in 1995 as a result of very strong average wage growth and a dip in inflation. Real income growth is expected to accelerate in 1997 to 4.5 percent as a result of higher employment growth coupled with continued strong wage growth and low inflation. Real income growth is expected to slow during the remainder of the forecast as a result of increasing inflation and more modest wage and employment growth. Washington real personal income is expected to rise 3.7 percent in fiscal 1998 and 3.0 percent in 1999.

2. Nominal personal income growth improved only slightly in fiscal 1996 to 6.1 percent from 5.9 percent the previous year as the improvement in real growth was largely offset by a reduction in inflation. Higher inflation and employment growth in 1997 should combine to raise nominal income growth to 6.8 percent in 1997. Slowing average wage and employment growth are expected to hold nominal income growth to a still respectable 6.1 percent in 1998 and 5.8 percent in 1999.

3. Held back by a 1.6 percent decline in manufacturing employment, Washington wage and salary employment growth slowed to only 1.7 percent in fiscal 1996 from 2.5 percent in 1995. The forecast calls for higher employment growth during the coming years led by the aerospace and high tech sectors. The forecast expects employment growth of 3.3 percent in fiscal 1997, 2.9 percent in 1998, and 2.5 percent in 1999.

- ◆ Lumber and wood products employment increased 500 in the fourth quarter of 1996 to 36,200 following an increase of 900 in the third quarter. Despite the uptick in the second half of 1997, however, the long term trend is negative. Lumber and wood products employment is now 6,300 lower than the cyclical peak in the fourth quarter of 1988 as timber supply constraints have reduced Washington's share of the nation's wood products employment. Lumber and wood products employment is expected to resume its declining trend, falling another 1,600 by the end of 1999.
- ◆ Aerospace employment soared 6,900 in the fourth quarter of 1996 following an 6,800 increase in the third quarter. Boeing intends to nearly double its airplane production rate during 1997 which should result in strong employment growth in 1997 as well. Slower growth is expected in 1998 and 1999, though, as production levels off. Washington aerospace employment, which fell 37,700 from the first quarter of 1990 to the fourth quarter of 1995 (excluding the strike in the 1995), rose 14,900 in 1996 and is expected to increase 9,600 in 1997, 1,300 in 1998, and 1,000 in 1999 for a total increase of 26,700.
- ◆ Construction employment declined 600 in the fourth quarter of 1996 to 127,800 but is up 5.3 percent over the year ago level. Washington's construction industry has been remarkably stable during the last six and one-half years. While construction employment in Washington never declined during the last recession, growth has averaged only 1.2 percent per year since the construction boom of the late 1980's ended in the second quarter of 1990. Construction employment growth is expected to average 1.8 percent in 1997, slowing to 0.4 percent per year in 1998 and 1999.
- ◆ Employment in finance, insurance, and real estate rose at a 1.8 percent rate in the fourth quarter of 1996. Interest rates are rising, which is a negative for refinancing activity and the housing market is not expected to boom. In addition, employment in the financial sector continues to suffer from consolidations. Finance insurance and real estate employment growth is expected to continue at a 1.8 percent through 1997, slowing to an average rate of 1.1 percent in 1998 and 1999.
- ◆ Retail trade employment fell at a 0.3 percent annual rate in the fourth quarter of 1996 and was up only 1.6 percent over the year ago level. While this sector is also suffering from a shakeout, it is expected to benefit from an upturn in Washington's population

growth during the next three years. Retail trade employment growth is expected to increase to an average rate of 2.9 percent during the final twelve quarters of the forecast.

- ◆ Services employment rose at a moderate 1.8 percent annual rate in the fourth quarter of 1996 but at a 3.6 percent clip over the last four quarters. The reductions in Hanford cleanup employment appear to be winding down and the software industry continues to hire at a feverish pace. The strong local economy is also benefiting the temporary help services industry which is classified as a business service. As a result of these trends, as well as the nationwide shift to services employment, the services sector is expected to continue to outperform the overall economy. The forecast expects services employment growth to average 3.8 percent through the end of 1999.
- ◆ State and local government employment fell at a 1.4 percent annual rate in the fourth quarter following a 4.2 surge in the third quarter. Employment is up 2.2 percent over the year ago level. Washington's state and local government employment is benefiting from above average population growth. The school age population is growing at nearly twice the overall population which significant for this sector since public education represents more than half of state and local government employment. The forecast expects state and government employment to grow at an average rate of 2.6 percent per year during the remainder of the forecast.

4. The number of housing units authorized by building permit declined 1.5 percent in fiscal 1996 to 40,900 following a 6.8 percent decline the previous year. The single family housing market is expected to continue to decline due to higher mortgage interest rates but this should be more than offset by a recovery in the multi-family market due to an expected upturn in population growth. The housing permit forecast expects 42,100 units in fiscal 1997, 43,500 units in fiscal 1998, and 44,000 in 1999.

5. Inflation in the Seattle metropolitan area, as measured by the consumer price index for all urban consumers, declined to 2.8 percent in fiscal 1996 from 3.5 percent in 1995. The local inflation rate is currently well below the cyclical high of 7.6 percent in 1991 and about the same as the U.S. rate of 2.7 percent. Based on data for the first half of fiscal 1997, though, the Seattle inflation rate appears poised to jump to 4.1 percent in the current fiscal year, well above the corresponding U.S. city average rate of 2.9 percent. The Seattle inflation rate is expected to continue to exceed the national average due to the relatively strong local economy. The forecast calls for an increase of 3.0 percent in fiscal 1998 and 3.2 percent in 1999.

Table 1.2 provides a fiscal year summary of the state economic indicators.

## **Alternative Forecasts**

As required by statute, two alternatives to the baseline forecast have also been adopted by the Forecast Council. One of these was based on more optimistic economic assumptions than the baseline and one was based on more pessimistic assumptions. These alternatives are summarized in Table 1.3.

The optimistic alternative assumes that the economy continues to grow faster than its long term potential during the next six quarters. The unemployment rate continues to fall, dipping below 5 percent by mid 1998. The response by the Fed is too little and too late to prevent inflation from accelerating. When the Fed does respond to the emerging inflation threat, the result is a much more

severe increase in interest rates than in the baseline forecast. The housing market collapses and consumer confidence plunges. The result is a recession in the first three quarters of 1999 during which real GDP falls 1.8 percent. While this scenario does encompass a recession, real growth is stronger during most of the forecast and inflation is higher than in the baseline. These adjustments were supplemented at the state level with higher personal income, a stronger rebound in aerospace employment than assumed in the baseline forecast, and higher wage and price growth in Washington. Population growth and construction employment were also enhanced in the optimistic alternative. By the end of the 1997-99 biennium, Washington nonagricultural employment is 23,100 higher than in the baseline forecast and Washington personal income is \$7.5 billion higher. The optimistic scenario generated \$925 million (4.8 percent) more General Fund-State Revenue in the 1997-99 biennium than did the baseline forecast.

In the pessimistic alternative forecast, the strong growth in the fourth quarter carries over into early 1997 raising fears of higher inflation. The Fed overreacts to the strong growth by raising the Fed funds rate to 6.5 percent by the end of the year. Consumer confidence plummets and the stock market crashes causing consumer spending to soften and business investment to decline. Because there are no fundamental imbalances in the economy, the resulting recession is mild. Real GDP declines 1.2 percent from the second quarter of 1997 to the first quarter of 1998. Convinced that inflation is under control, the Fed reverses course in 1998, lowering the Fed funds rate to 5.5 percent by the beginning of 1999. Locally, the aerospace cycle peaks in the third quarter of 1997 rather than rising throughout the forecast as in the baseline forecast. Washington wages and prices grow more slowly than in the baseline and Washington personal income is lower. Population growth is also lower in this scenario as is construction employment growth. At the end of the 1997-99 biennium, Washington nonagricultural employment is 78,400 lower than in the baseline forecast and Washington personal income is \$8.4 billion lower. The pessimistic scenario produced \$1,088 million (5.6 percent) less revenue in 1997-99 than did the baseline forecast.

### **Governor's Council of Economic Advisors Scenario**

In addition to the optimistic and pessimistic forecasts, the staff has prepared a forecast based on the opinions of the Governor's Council of Economic Advisors (GCEA) as summarized in Table 1.3. In the GCEA scenario, the U.S. and state forecasts were adjusted to match the average view of the Council members. There were only minor differences between the Governor's Council scenario and the baseline forecast. For the U.S., the Council members expected slightly lower real GDP growth but higher inflation than in the baseline forecast. The GCEA forecast for Washington State was also very similar to the baseline forecast but the Council members expected stronger income and employment growth than did the baseline forecast as well as a generally higher level of housing activity. At the end of the 1997-99 biennium, Washington nonagricultural employment is 12,700 higher in the GCEA forecast than in the baseline and Washington personal income is \$0.8 billion higher. The Governor's Council scenario generated \$97 million (0.5 percent) more General Fund-State revenue in the 1997-99 biennium than did the baseline forecast.

Table 1.1

Fiscal Years

**U.S. Economic Forecast Summary**

Forecast 1997 to 1999

	1992	1993	1994	1995	1996	1997	1998	1999
<b>Real National Income Accounts (Billions of Chained 1992 Dollars)</b>								
Real Gross Domestic Product	6145.8	6317.8	6489.6	6688.3	6816.0	7020.4	7186.0	7331.2
% Ch	1.0	2.8	2.7	3.1	1.9	3.0	2.4	2.0
Real Consumption	4149.7	4279.4	4407.2	4529.5	4635.9	4755.4	4899.8	5011.8
% Ch	0.8	3.1	3.0	2.8	2.3	2.6	3.0	2.3
Real Nonresidential Fixed Investment	546.7	573.4	619.7	688.8	734.1	796.4	839.5	868.9
% Ch	-3.6	4.9	8.1	11.2	6.6	8.5	5.4	3.5
Real Residential Fixed Investment	209.2	234.0	258.3	265.8	270.3	277.2	282.4	280.9
% Ch	5.8	11.9	10.4	2.9	1.7	2.6	1.9	-0.5
Real Personal Income	5185.1	5296.5	5399.3	5586.7	5775.6	5975.7	6134.7	6253.9
% Ch	0.9	2.1	1.9	3.5	3.4	3.5	2.7	1.9
Real Per Capita Income (\$/Person)	20,380	20,600	20,787	21,297	21,808	22,356	22,745	22,983
% Ch	-0.2	1.1	0.9	2.5	2.4	2.5	1.7	1.0
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator (Chain-Wt.,1992=1.0)	0.984	1.014	1.038	1.065	1.087	1.110	1.137	1.167
% Ch	3.5	3.0	2.3	2.6	2.1	2.2	2.4	2.7
U.S. Consumer Price Index (1982-84=1.0)	1.383	1.426	1.463	1.505	1.546	1.591	1.633	1.679
% Ch	3.2	3.1	2.6	2.9	2.7	2.9	2.6	2.9
Employment Cost Index (June 1989=1.0)	1.105	1.134	1.169	1.202	1.239	1.278	1.321	1.361
% Ch	3.4	2.6	3.0	2.9	3.1	3.2	3.3	3.1
<b>Current Dollar National Income (Billions of Dollars)</b>								
Gross Domestic Product	6068.8	6400.9	6732.4	7107.8	7408.1	7767.8	8124.6	8485.7
% Ch	4.3	5.5	5.2	5.6	4.2	4.9	4.6	4.4
Personal Income	5103.8	5372.1	5603.4	5947.4	6275.6	6634.9	6973.0	7301.3
% Ch	4.5	5.3	4.3	6.1	5.5	5.7	5.1	4.7
<b>Employment (Millions)</b>								
U.S. Civilian Labor Force	127.1	128.6	130.1	131.8	132.9	135.2	137.1	138.7
Total U.S. Employment	117.9	119.2	121.6	124.3	125.5	128.1	129.9	131.3
Unemployment Rate (%)	7.23	7.30	6.55	5.69	5.57	5.26	5.26	5.38
Wage and Salary Employment	108.22	109.47	112.29	115.94	118.27	120.86	123.09	124.80
% Ch	-0.6	1.2	2.6	3.2	2.0	2.2	1.8	1.4
Manufacturing	18.23	18.08	18.15	18.48	18.35	18.26	18.15	18.07
% Ch	-2.6	-0.8	0.4	1.8	-0.7	-0.5	-0.6	-0.4
Durable Manufacturing	10.40	10.24	10.29	10.60	10.65	10.70	10.57	10.48
% Ch	-4.0	-1.6	0.5	3.0	0.5	0.4	-1.1	-0.9
Nondurable Manufacturing	7.83	7.84	7.86	7.88	7.70	7.56	7.57	7.59
% Ch	-0.8	0.2	0.1	0.4	-2.4	-1.8	0.1	0.2
Nonmanufacturing	89.99	91.39	94.14	97.45	99.92	102.60	104.95	106.73
% Ch	-0.2	1.6	3.0	3.5	2.5	2.7	2.3	1.7
Services	28.64	29.60	30.81	32.40	33.74	34.98	36.21	37.25
% Ch	1.8	3.4	4.1	5.2	4.1	3.7	3.5	2.9
<b>Miscellaneous Indicators</b>								
Credit Outstanding/Disp. Income	17.3	17.0	18.3	19.9	21.1	21.7	21.7	21.7
Auto Sales (Millions)	8.2	8.3	8.8	8.8	8.7	8.3	8.1	8.0
% Ch	-4.6	0.8	6.5	-0.5	-0.7	-4.4	-3.3	-0.4
Housing Starts (Millions)	1.131	1.211	1.395	1.386	1.448	1.430	1.368	1.339
% Ch	10.8	7.1	15.1	-0.7	4.5	-1.2	-4.3	-2.1
Federal Budget Surplus (Billions)	-250.0	-277.8	-217.5	-178.1	-148.7	-120.4	-140.1	-124.5
Net Exports (Billions)	-18.7	-47.0	-78.8	-107.4	-85.1	-110.4	-130.5	-128.0
3-Month Treasury Bill Rate (%)	4.37	3.02	3.32	5.27	5.14	5.06	5.42	5.25
30-Year U.S. Govt. Bond Rate (%)	7.93	7.23	6.59	7.54	6.54	6.76	6.94	7.01
Mortgage Rate (%)	8.84	7.85	7.47	8.61	7.60	7.91	8.16	8.24

Table 1.2

Fiscal Years

**Washington Economic Forecast Summary**  
 Forecast 1997 to 1999

	1992	1993	1994	1995	1996	1997	1998	1999
<b>Real Income (Billions of 1992 Chained Dollars)</b>								
Real Personal Income	107.841	111.791	114.153	117.827	122.509	128.007	132.699	136.631
% Ch	3.3	3.7	2.1	3.2	4.0	4.5	3.7	3.0
Real Wage and Salary Disb.	61.244	63.174	63.566	65.308	68.212	71.996	74.753	77.055
% Ch	3.9	3.2	0.6	2.7	4.4	5.5	3.8	3.1
Real Nonwage Income	46.596	48.617	50.587	52.519	54.298	56.011	57.947	59.575
% Ch	2.7	4.3	4.1	3.8	3.4	3.2	3.5	2.8
Real Per Capita Income (\$/Person)	21,134	21,402	21,446	21,749	22,249	22,869	23,279	23,496
% Ch	0.9	1.3	0.2	1.4	2.3	2.8	1.8	0.9
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator (Chain-Wt.,1992=1.0)	0.984	1.014	1.038	1.065	1.087	1.110	1.137	1.167
% Ch	3.5	3.0	2.3	2.6	2.1	2.2	2.4	2.7
Seattle Cons. Price Index (1982-84=1.0)	1.365	1.411	1.452	1.502	1.545	1.608	1.656	1.709
% Ch	4.0	3.3	2.9	3.5	2.8	4.1	3.0	3.2
Avg. Hourly Earnings-Mfg. (\$/Hour)	13.58	13.91	14.07	14.64	14.39	16.33	17.24	17.53
% Ch	3.8	2.4	1.2	4.0	-1.7	13.5	5.6	1.7
<b>Current Dollar Income (Billions of Dollars)</b>								
Nonfarm Personal Income	105.349	112.397	117.457	124.881	132.390	141.224	150.014	158.671
% Ch	6.8	6.7	4.5	6.3	6.0	6.7	6.2	5.8
Personal Income	106.154	113.388	118.468	125.436	133.116	142.129	150.836	159.519
% Ch	6.9	6.8	4.5	5.9	6.1	6.8	6.1	5.8
Disposable Personal Income	92.984	99.273	103.369	109.349	115.609	123.139	131.301	138.890
% Ch	7.4	6.8	4.1	5.8	5.7	6.5	6.6	5.8
Per Capita Income (\$/Person)	20,802	21,707	22,256	23,153	24,174	25,391	26,459	27,431
% Ch	4.4	4.4	2.5	4.0	4.4	5.0	4.2	3.7
<b>Employment (Thousands)</b>								
Washington Civilian Labor Force	2583.9	2686.4	2701.2	2756.3	2855.2	2914.8	2980.9	3052.0
Total Washington Employment	2401.8	2474.7	2511.6	2585.1	2668.5	2731.0	2803.0	2868.4
Unemployment Rate (%)	7.04	7.88	7.02	6.21	6.54	6.31	5.97	6.02
Wage and Salary Employment	2201.4	2235.8	2275.1	2331.5	2371.1	2448.9	2520.2	2582.4
% Ch	1.9	1.6	1.8	2.5	1.7	3.3	2.9	2.5
Manufacturing	349.9	344.4	337.1	337.9	332.4	356.5	369.1	373.6
% Ch	-2.8	-1.6	-2.1	0.2	-1.6	7.3	3.5	1.2
Durable Manufacturing	249.1	242.0	232.3	230.5	222.7	247.4	257.6	260.2
% Ch	-2.6	-2.9	-4.0	-0.8	-3.4	11.1	4.1	1.0
Aerospace	114.8	107.8	96.3	89.0	76.9	96.1	104.7	106.0
% Ch	-0.4	-6.1	-10.7	-7.6	-13.6	25.0	8.9	1.3
Nondurable Manufacturing	100.8	102.5	104.8	107.4	109.7	109.1	111.5	113.4
% Ch	-3.4	1.6	2.2	2.5	2.1	-0.5	2.2	1.7
Nonmanufacturing	1851.5	1891.3	1938.0	1993.6	2038.8	2092.4	2151.0	2208.8
% Ch	2.8	2.2	2.5	2.9	2.3	2.6	2.8	2.7
Construction	118.7	118.5	121.9	122.6	123.5	128.4	130.1	130.3
% Ch	0.4	-0.1	2.9	0.6	0.7	4.0	1.3	0.2
Services	546.7	568.2	585.9	610.7	637.3	659.7	686.5	712.8
% Ch	5.1	3.9	3.1	4.2	4.3	3.5	4.1	3.8
<b>Housing Indicators</b>								
Housing Units Authorized (Thousands)	36.941	38.245	44.523	41.503	40.870	42.088	43.474	44.014
% Ch	0.2	3.5	16.4	-6.8	-1.5	3.0	3.3	1.2
Mortgage Rate (%)	8.84	7.85	7.47	8.61	7.60	7.91	8.16	8.24



Table 1.3

**Comparison of Alternative Forecasts**

	<b>Fiscal Year 1997</b>				<b>Fiscal Year 1998</b>				<b>Fiscal Year 1999</b>			
	O	B	P	G	O	B	P	G	O	B	P	G
<b>U.S.</b>												
Real GDP	7023.3	7020.4	7015.3	7013.6	7230.3	7186.0	7007.4	7159.5	7317.4	7331.2	7132.7	7301.2
% Ch	3.0	3.0	2.9	2.9	2.9	2.4	-0.1	2.1	1.2	2.0	1.8	2.0
Implicit Price Deflator	1.111	1.110	1.111	1.111	1.146	1.137	1.140	1.139	1.188	1.167	1.168	1.171
% Ch	2.2	2.2	2.3	2.3	3.2	2.4	2.6	2.5	3.7	2.7	2.5	2.8
Mortgage Rate	7.90	7.91	7.93	7.94	8.20	8.16	8.93	8.17	9.51	8.24	8.87	8.18
3 Month T-Bill Rate	5.03	5.06	5.09	5.09	5.51	5.42	5.83	5.29	6.93	5.25	5.22	5.06
<b>Washington</b>												
Real Personal Income	128.892	128.007	127.141	128.053	135.169	132.699	128.184	132.964	140.454	136.631	129.699	136.940
% Ch	5.2	4.5	3.8	4.5	4.9	3.7	0.8	3.8	3.9	3.0	1.2	3.0
Personal Income	143.166	142.129	141.254	142.286	154.888	150.836	146.093	151.480	166.899	159.519	151.511	160.318
% Ch	7.6	6.8	6.1	6.9	8.2	6.1	3.4	6.5	7.8	5.8	3.7	5.8
Employment	2452.3	2448.9	2446.2	2452.1	2540.3	2520.2	2480.4	2530.8	2614.1	2582.4	2505.4	2593.4
% Ch	3.4	3.3	3.2	3.4	3.6	2.9	1.4	3.2	2.9	2.5	1.0	2.5
Housing Permits	42.745	42.088	40.814	41.893	48.287	43.474	32.839	44.717	43.412	44.014	37.245	44.133
% Ch	4.6	3.0	-0.1	2.5	13.0	3.3	-19.5	6.7	-10.1	1.2	13.4	-1.3

(O) Optimistic; (B) Baseline; (P) Pessimistic; (G) Governor's Council of Economic Advisors

Table 1.4  
**Forecast Analysis**  
 Comparison of Forecasts for 1995-97

Forecast Date	1994				1995				1996				1997	
	Feb.	June	Sept.	Nov.	Mar.	June	Sept.	Nov.	Feb.	June	Sept.	Nov.	Mar.	June
<b>U.S.</b>														
Percent Growth, 95:2-97:2														
Real GDP *	5.4	4.9	5.7	5.4	4.9	5.2	4.9	5.1	5.1	4.0	4.5	4.9	5.6	
Implicit Price Deflator *	6.4	6.9	6.3	6.1	6.1	5.5	5.4	4.8	4.2	4.7	4.5	4.4	4.1	
Average Rate, 95:2 to 97:2														
3 Month T-Bill Rate	3.27	3.43	4.35	4.56	5.10	5.14	4.82	5.00	4.86	5.16	5.21	5.22	5.10	
Mortgage Rate	7.38	7.61	8.05	8.21	8.36	7.98	7.58	7.57	7.06	7.98	7.92	7.91	7.75	
<b>Washington</b>														
Percent Growth, 95:2-97:2														
Employment **	5.4	5.1	5.8	6.0	4.4	3.8	4.7	5.6	4.7	4.7	5.0	5.0	5.5	
Personal Income	12.2	12.6	13.7	13.8	11.4	10.9	11.1	11.4	10.5	10.9	11.5	12.8	13.4	
Real Personal Income *	5.5	5.3	7.0	7.2	4.9	5.1	5.4	6.3	6.0	5.9	6.7	8.1	8.9	
Total, 95:2-97:2														
Housing Units Authorized	63.3	65.6	62.9	75.3	74.4	71.8	75.7	74.7	78.6	81.5	81.9	82.4	83.0	

\* Beginning in June 1996, the forecast reflects the 1996 comprehensive revision of the national income and product accounts which introduced a "chain weight" method of calculating real GDP and its components. Based on the June 1996 forecast, the change in methodology reduces real GDP growth by 1.6 percent, increases implicit price deflator growth by 1.4 percent, and reduces Washington real personal income growth by 1.4 percent from the second quarter of 1995 to the second quarter of 1997.

\*\* Beginning in March 1997, the forecast reflects an increase in the estimate for noncovered corporate officers from 38,264 to 48,014 which adds 0.4 percent to the growth of Washington employment from the second quarter of 1995 to the second quarter of 1997.



Table 1.5

Fiscal Years

**Forecast Comparison**

	1997	1998	1999
<b>U.S.</b>			
<b>Real GDP</b>			
March Baseline	7020.4	7186.0	7331.2
% Ch	3.0	2.4	2.0
November Baseline	6989.3	7151.5	7311.8
% Ch	2.5	2.3	2.2
<b>Implicit Price Deflator</b>			
March Baseline	1.110	1.137	1.167
% Ch	2.2	2.4	2.7
November Baseline	1.112	1.140	1.170
% Ch	2.3	2.5	2.7
<b>U.S. Unemployment Rate</b>			
March Baseline	5.26	5.26	5.38
November Baseline	5.30	5.42	5.45
<b>Mortgage Rate</b>			
March Baseline	7.91	8.16	8.24
November Baseline	8.22	8.22	8.05
<b>3 Month T-Bill Rate</b>			
March Baseline	5.06	5.42	5.25
November Baseline	5.29	5.49	5.29
<b>Washington</b>			
<b>Real Personal Income</b>			
March Baseline	128.007	132.699	136.631
% Ch	4.5	3.7	3.0
November Baseline	127.420	132.076	136.488
% Ch	4.0	3.7	3.3
<b>Personal Income</b>			
March Baseline	142.129	150.836	159.519
% Ch	6.8	6.1	5.8
November Baseline	141.696	150.533	159.711
% Ch	6.4	6.2	6.1
<b>Employment</b>			
March Baseline	2448.9	2520.2	2582.4
% Ch	3.3	2.9	2.5
November Baseline	2437.8	2506.6	2581.1
% Ch	3.1	2.8	3.0
<b>Housing Permits</b>			
March Baseline	42.088	43.474	44.014
% Ch	3.0	3.3	1.2
November Baseline	41.428	44.209	46.649
% Ch	1.2	6.7	5.5

Table 1.6  
**Long Range Economic Outlook**  
Forecast 1997 to 2007

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
<b>U.S.*</b>											
Real GDP, %Ch	2.9	2.1	2.1	2.1	1.6	1.5	2.2	2.5	2.4	2.0	2.0
Implicit Price Deflator, %Ch	2.2	2.6	2.8	3.0	3.1	3.2	3.3	3.5	3.6	3.7	3.8
3 Month T-Bill Rate	5.24	5.35	5.20	4.89	4.79	4.77	4.76	4.77	4.80	4.80	4.79
Mortgage Rate	7.96	8.27	8.18	7.91	7.83	7.84	7.84	7.79	7.73	7.71	7.74
<b>State**</b>											
Real Personal Income, %Ch	4.2	3.2	3.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Personal Income, %Ch	6.5	5.9	5.9	5.6	5.7	5.8	5.9	6.1	6.2	6.3	6.3
Employment, %Ch	3.0	2.7	2.4	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0

\* March 1997 Baseline (1996-1999) extended with the DRI February 1997 Trendlong Forecast.

\*\* March 1997 Baseline (1996-1999) judgementally extended through 2006.

# Comparison of Washington and U.S. Economic Forecasts

CHART 1.1

**Total Nonagricultural Employment**

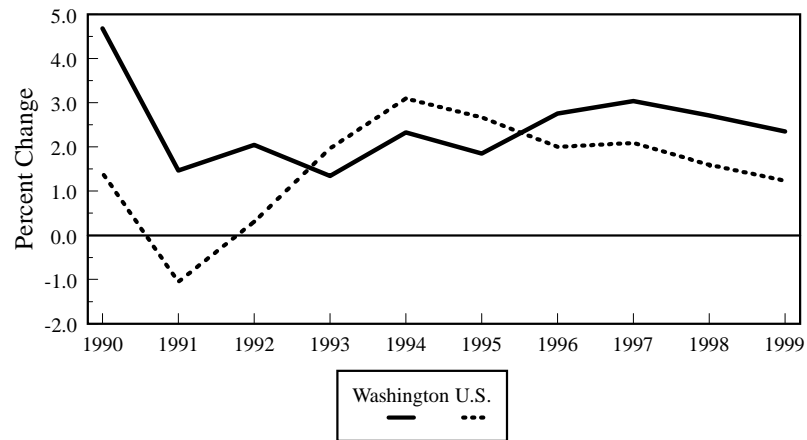


CHART 1.2

**Manufacturing Employment**

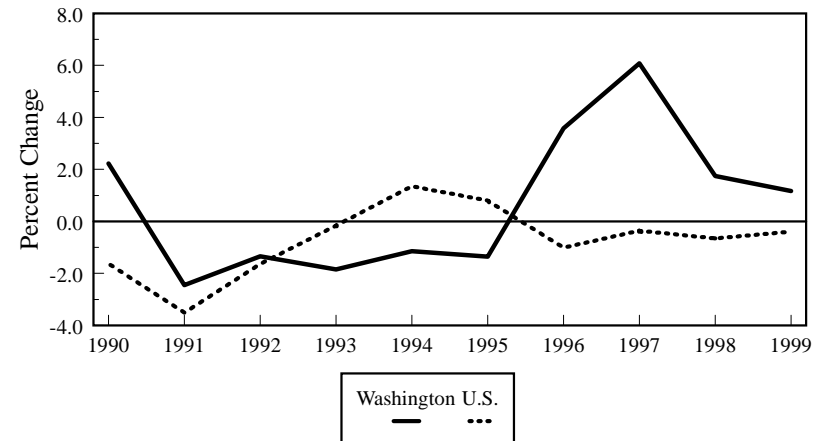


CHART 1.3

**Aerospace Employment**

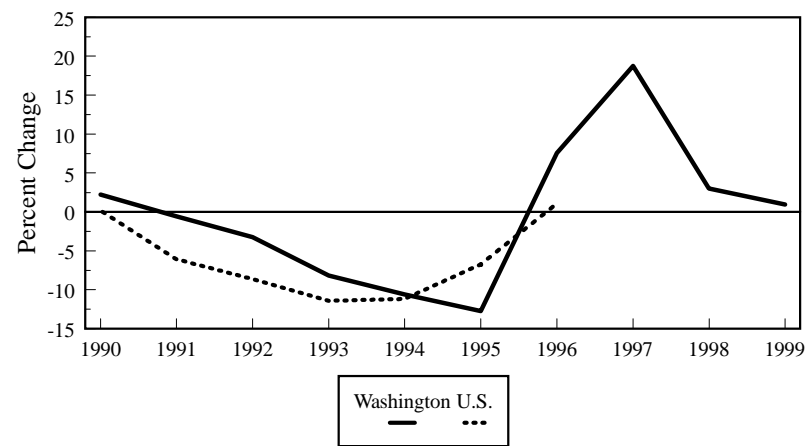
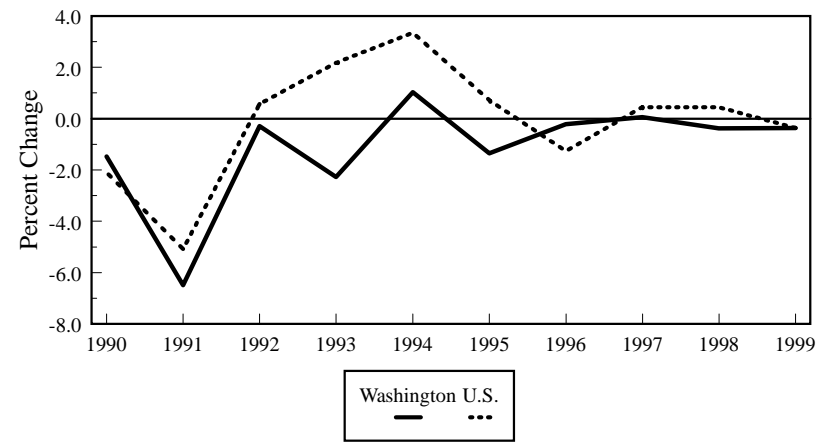


CHART 1.4

**Forest Products Employment**



# Comparison of Washington and U.S. Economic Forecasts

CHART 1.5

## Construction Employment

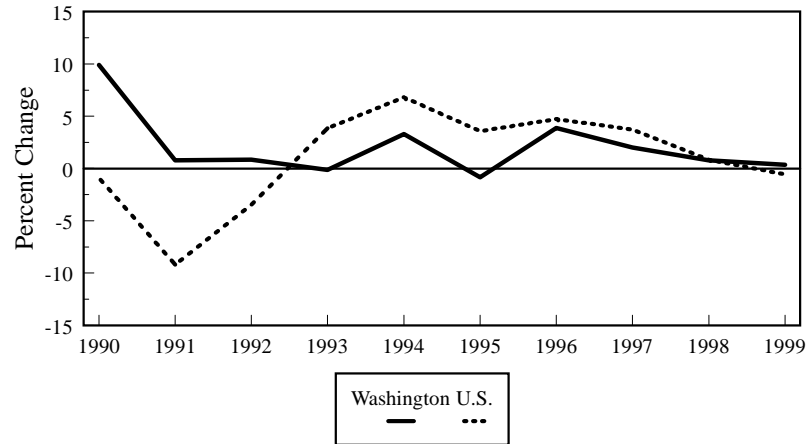


CHART 1.6

## Trade Employment

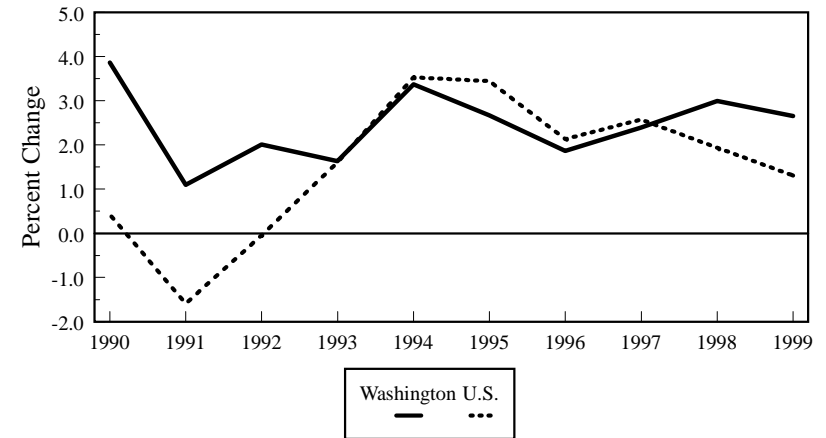


CHART 1.7

## Services Employment

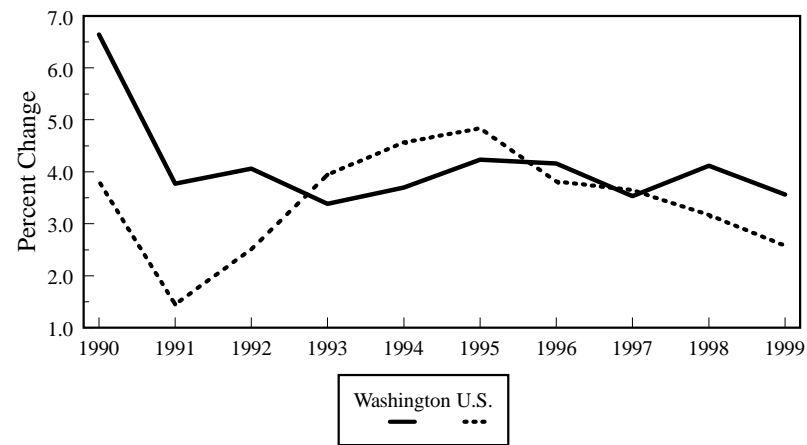
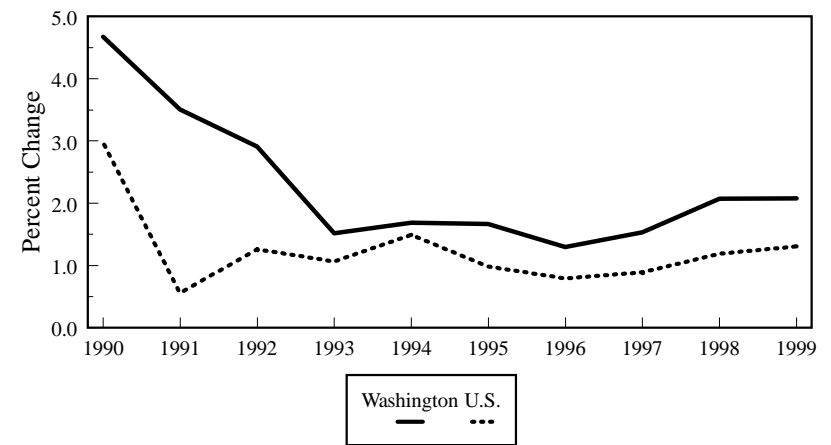


CHART 1.8

## Government Employment



# Comparison of Washington and U.S. Economic Forecasts

CHART 1.9

## Real Personal Income

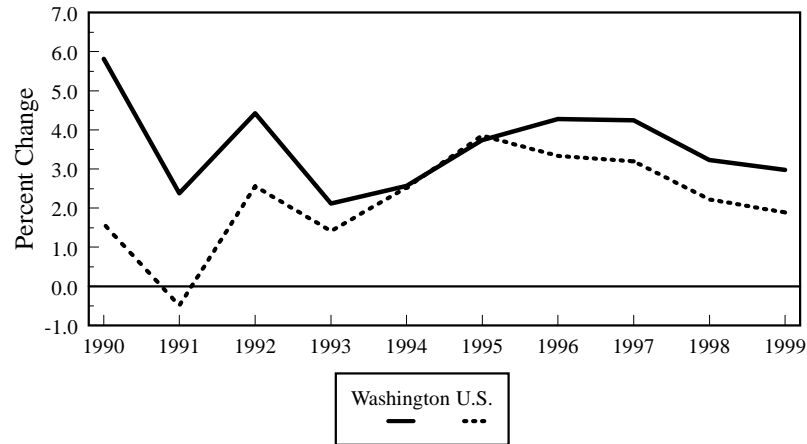


CHART 1.10

## Consumer Price Indices

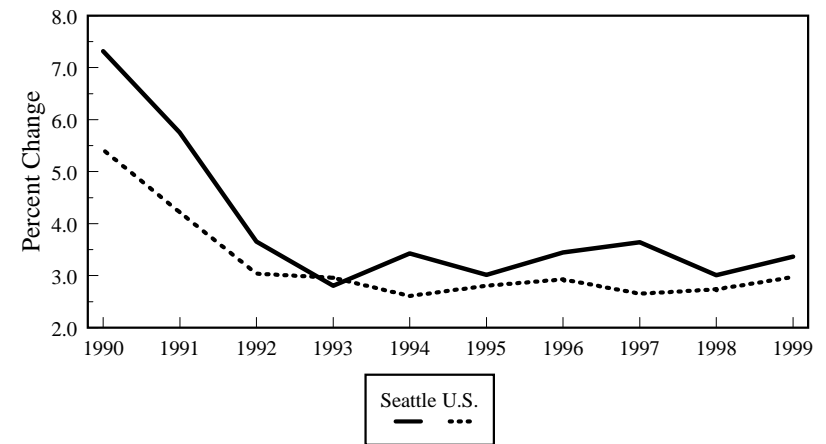


CHART 1.11

## Population

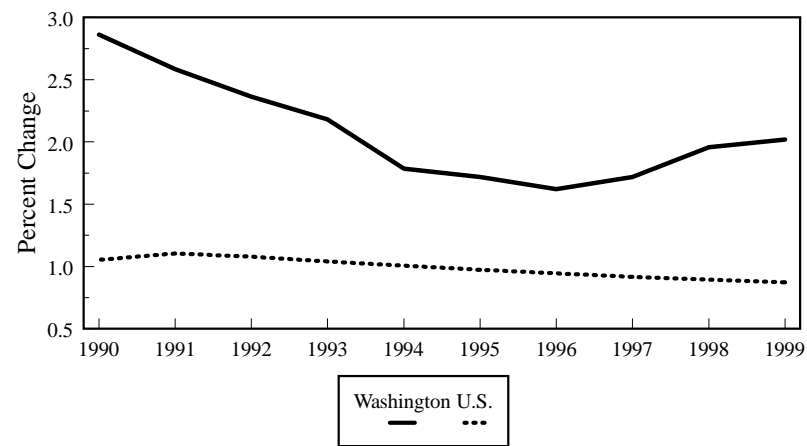
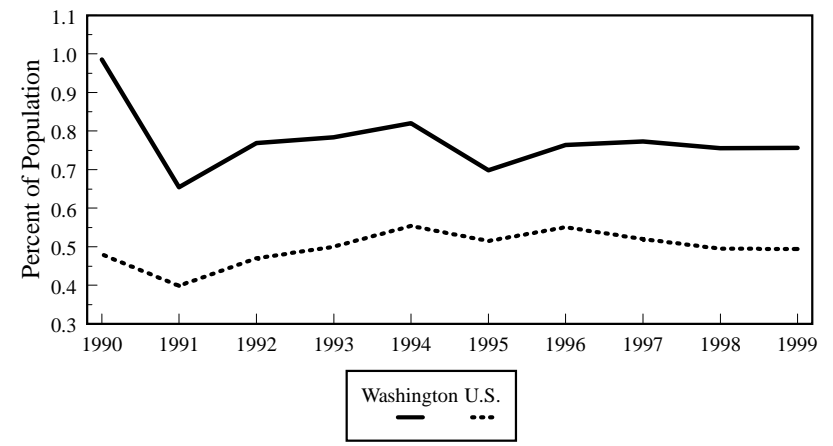


CHART 1.12

## Per Capita Housing Units



# Comparison of Alternative U.S. Forecasts

CHART 1.13

**Real GDP**

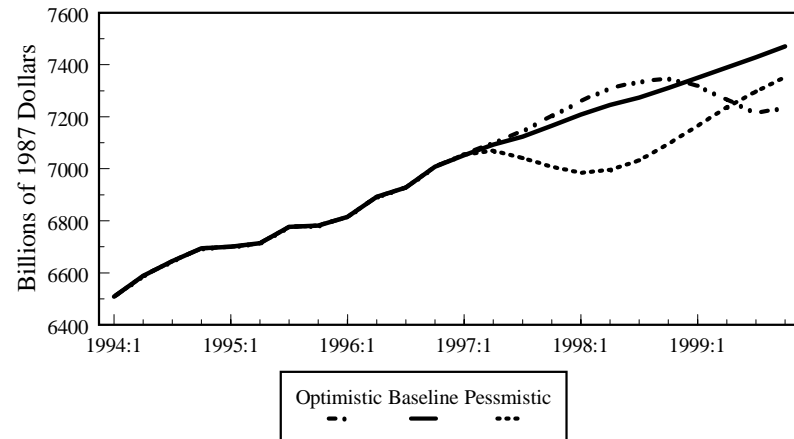


CHART 1.14

**Implicit Price Deflator**

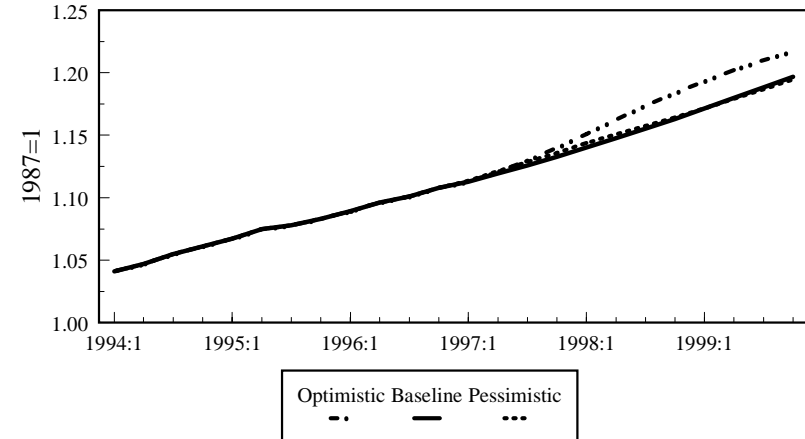


CHART 1.15

**Mortgage Rate**

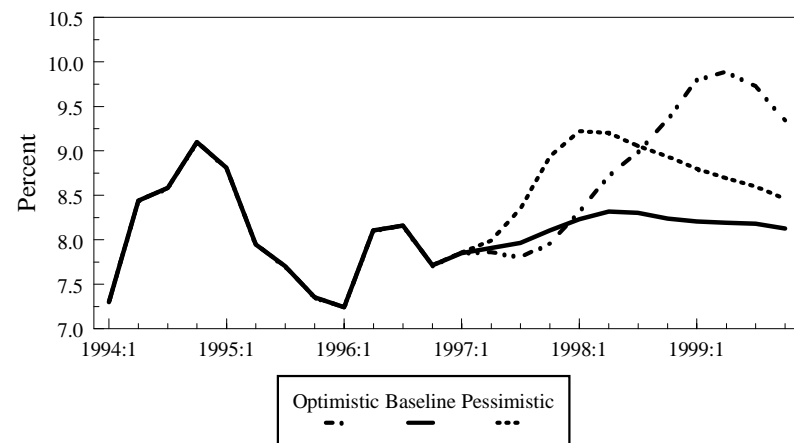
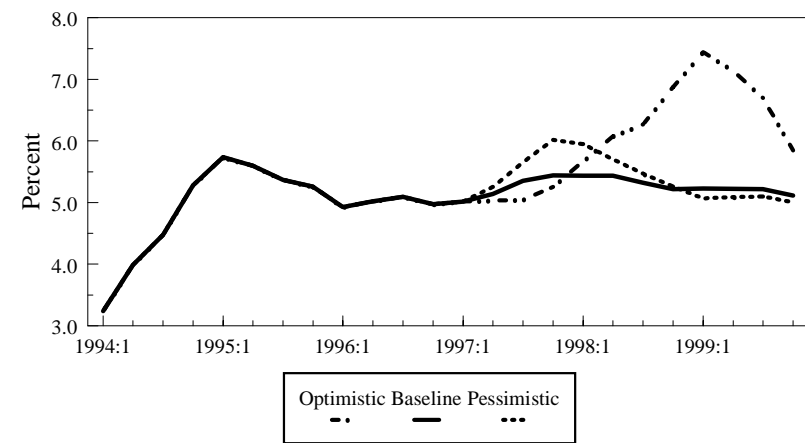


CHART 1.16

**Three Month T-Bill Rate**



# Comparison of Alternative Washington Forecasts

CHART 1.17

## Personal Income

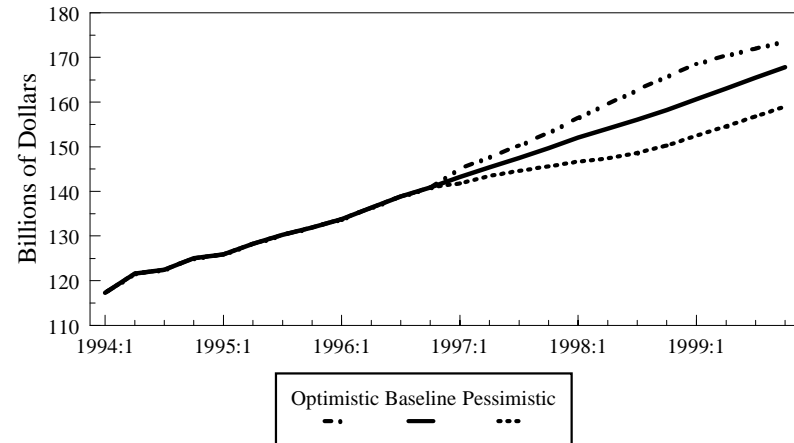


CHART 1.18

## Real Personal Income

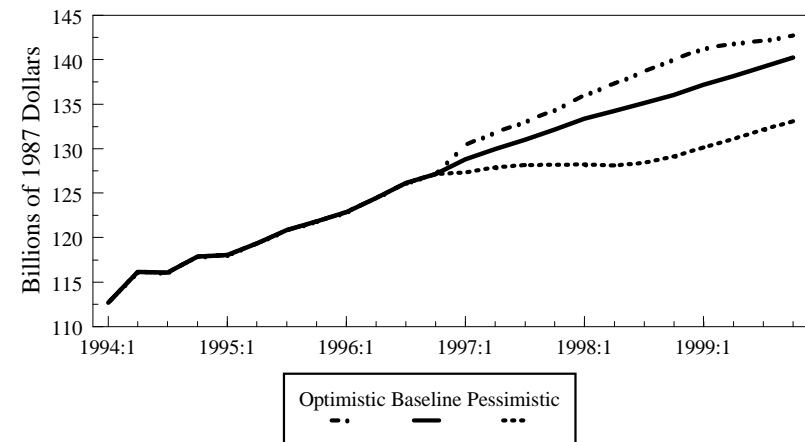


CHART 1.19

## Nonagricultural Employment

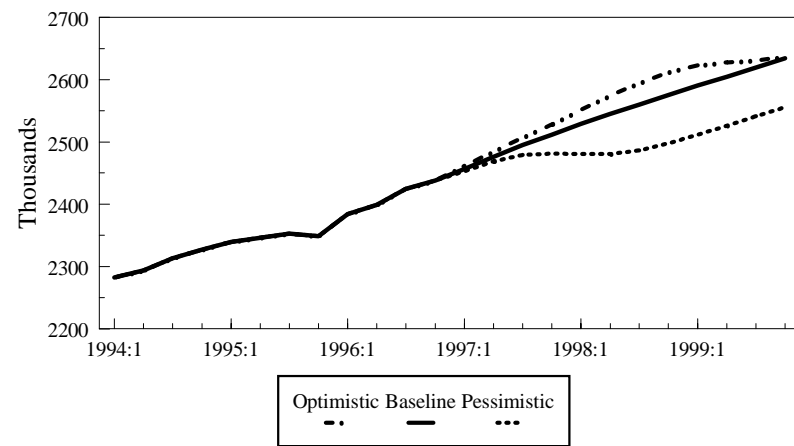
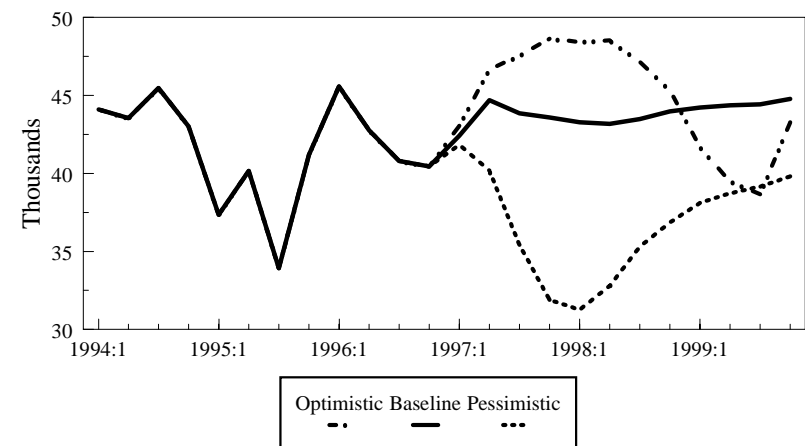


CHART 1.20

## Housing Permits



# Washington Business Indicators

## National News

The current U.S. expansion, now 72 months long, is the fourth longest since 1854, after the 1938-1945 (80 months), 1961-1969 (106 months) and 1982-1992 (96 months) expansions. This one should continue long enough to overtake the 1938-1945 expansion. The economy is enjoying its best days in 30 years, with the labor force at full employment, growth, inflation and wage pressures moderate, and nine out of the 10 components of the February index of leading indicators pointing up.

Two unknowns might create problems. First, the stock market. After soaring to record highs the past 18 months, the Dow Jones Industrial has retreated with the index falling over 100 points three trading days. A key question is whether the long bull market has ended, and, if so, whether it will be replaced by a bear, or a driftless market. Second, Federal Reserve actions to mitigate inflation. The Federal Reserve Open market Committee raised the federal funds rate .25 percent to 5.5 percent March 25 (the first increase in two years), according to their press release, “in light of persisting strength in demand, which is progressively increasing the risk of inflationary imbalances developing in the economy”. Many expect the Fed to follow through with more increases later in the year. If it does, the economy will slow down starting late in 1997 and continuing into 1998.

## State News

The state, led by Puget Sound, continues to outperform the rest of the nation. Year-over-year employment for February was a strong 3.2 percent (Chart 2.1), with the Seattle and Tacoma metropolitan areas both growing over 5 percent (Chart 2.16). Olympia, also showing life, grew 4 percent. Bremerton and Richland, the two weak spots, added no jobs the past 12 months.

The state’s unemployment rate—which has been higher than the national rate 48 out the past 50 years (see chapter 4)—fell to a seasonally adjusted five year low of 5 percent in February, or .4 percentage points below the U.S. ’s (Chart 2.3). Although this number will likely be revised upward, it is consistent with strong employment and sales numbers reported in recent months.

The state index of leading indicators rose three-tenths of a percent in February—with four of seven components showing improvement. The Seattle Times Help-Wanted Index soared to an all time high in February—the series starts in 1964—overshadowing its national counterpart, which



only managed to soar to a seven year high (Chart 2.7). Initial Claims for unemployment insurance fell to their lowest level since August 1993. The U.S. index of leading indicators rose .5 percent, its largest increase in a year. Finally, average hourly earnings rose slightly from 40.5 to 40.6 working hours a week. Three components fell, all slightly. Although aerospace employment (Chart 2.2), fell 300 in February, it is up 15 thousand over a year ago, to about 97 thousand. This compares with 80 thousand in September 1995—the trough in the aerospace cycle. Aerospace employment should rise another 8000 this year, as Boeing builds to work force required to meet existing orders. The Atlanta Fed.'s trade weighted exchange rate has gained strength in recent months—a byproduct of a strong U.S. economy, a booming stock market, and conservative monetary policies. The recent rise in long-term interest rates will likely strengthen it. Finally, housing starts fell from a robust 43.2 thousand annualized rate, to a still respectable 42.3 thousand.

The bi-monthly Regional Beige Book, published by the San Francisco Federal Reserve Bank, always contains anecdotal evidence of current happenings in the economy. The March 12th book tells of tight labor markets, wage hopping, and increasing wage pressures in the Pacific North West States. Food processing plants reported a substantial pickup in domestic and foreign demand for their goods—making capacity constraints a binding factor. . . reports of labor market tightness were most pronounced in Seattle and the San Francisco area”.

In sum, the state and national economy are both strong, and should continue to do well through the rest of the year.

# Key Economic Indicators

CHART 2.1

## Annual Employment Growth in Washington and in the U.S.

January 1980 to February 1997

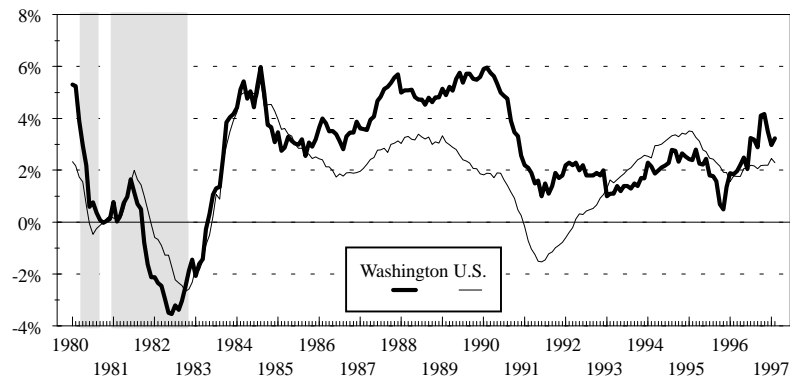


CHART 2.2

## Aerospace Employment

January 1959 to February 1997

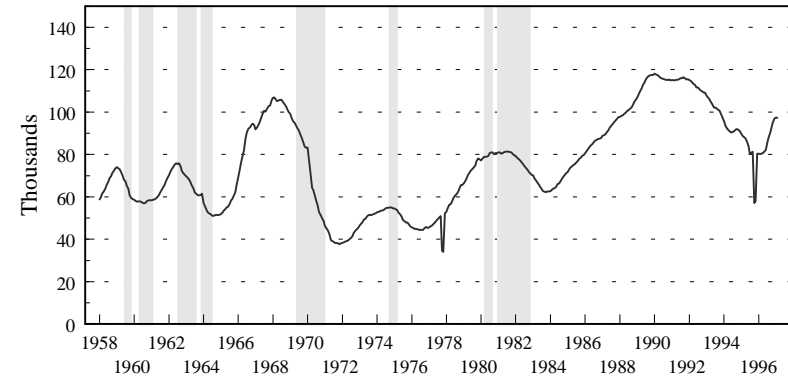


CHART 2.3

## Unemployment Rate

Seasonally Adjusted, January 1980 to February 1997

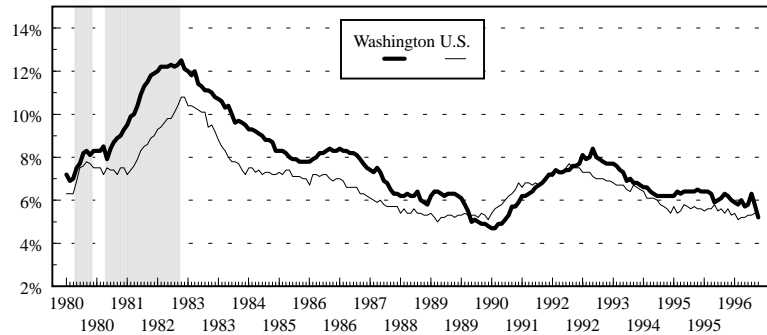
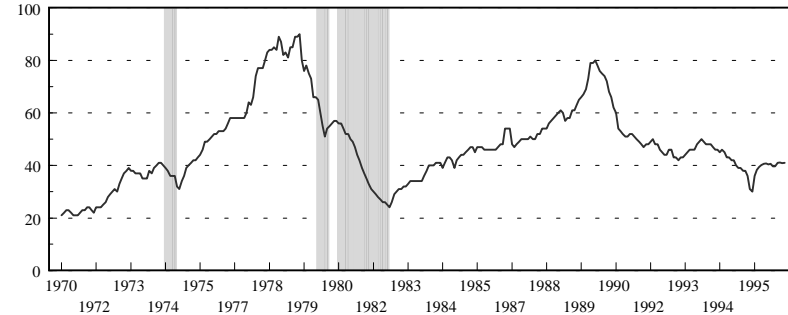


CHART 2.4

## The Washington Boom Monitor

January 1971 to January 1997



Shaded areas correspond to Washington State employment downturns.

# Washington State Leading Indicators

CHART 2.5

**The Washington and U.S. Indexes of Leading Indicators**  
January 1969 to February 1997

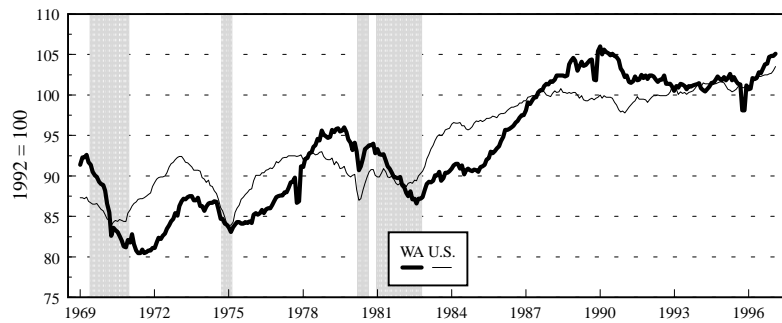


CHART 2.6

**Initial Claims for State Unemployment Insurance**  
January 1969 to February 1997, (Seasonally Adjusted)

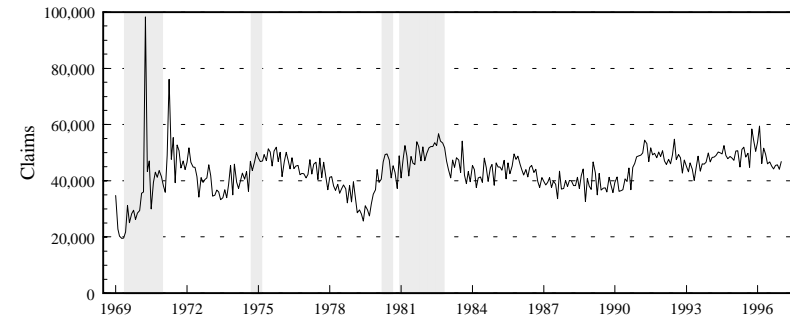
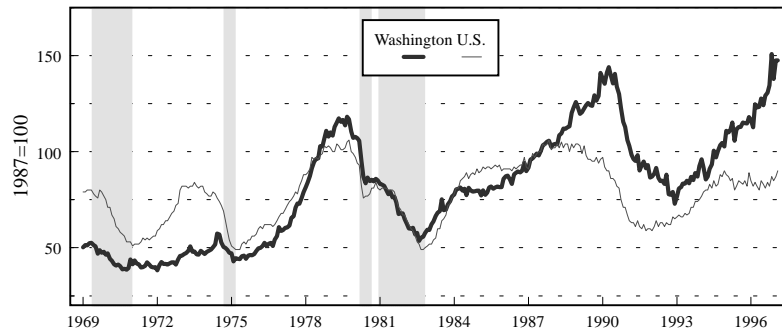


CHART 2.7

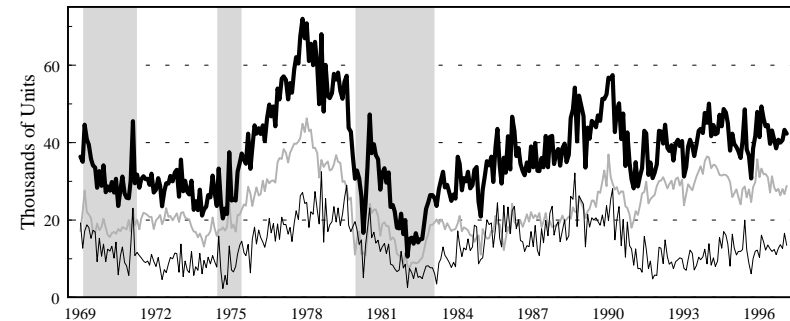
**Seattle Times and U.S. Help-Wanted Indexes**  
January 1969 to February 1997



Shaded areas correspond to Washington State employment downturns.

CHART 2.8

**Housing Units Authorized in Washington State**  
January 1969 to February 1997, (Smoothed, at Annual Rates)



## Other State Economic Indicators

CHART 2.9

### Average Weekly Hours in Manufacturing

March 1969 to December 1996, (3-Month Moving Average)

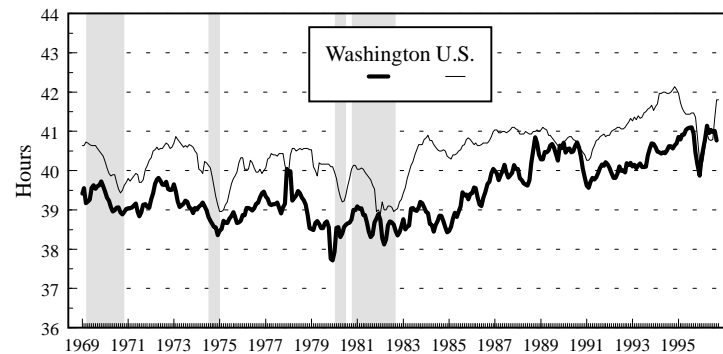
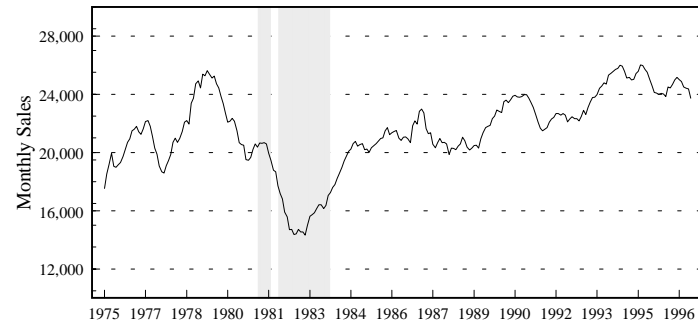


CHART 2.11

### New Car and Truck Sales in Washington

June 1975 to November 1996 (6-Month Moving Average, Seasonally Adjusted)



Shaded areas correspond to Washington State Employment downturns.

CHART 2.10

### Out-of-State Drivers Moving into Washington

July 1983 to February 1997, 12-Month Moving Average

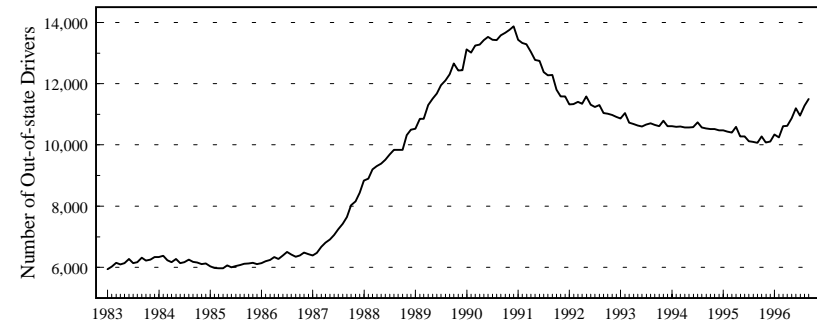
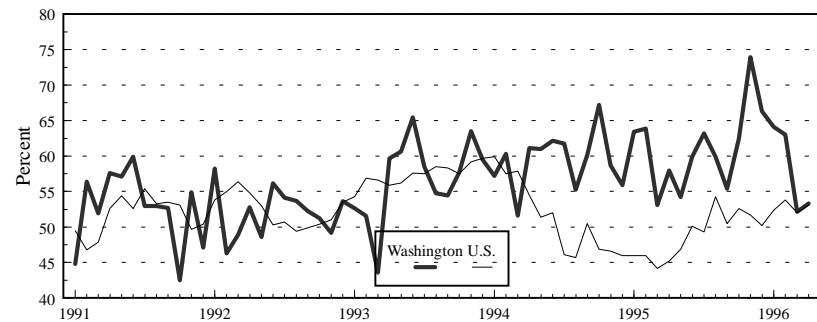


CHART 2.12

### Purchasing Management Composite Index

November 1991 to February 1997



# Other Economic Indicators

CHART 2.13  
**Quarterly U.S. GDP Growth (Chain-weighted)**  
 1979-I to 1996-IV

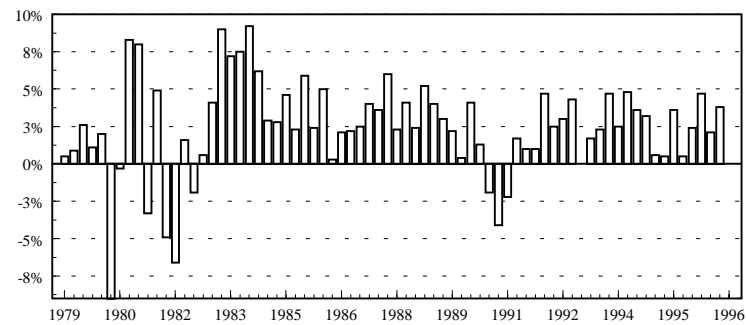


CHART 2.14  
**Inflation (US Consumer and Producer Price Index)**  
 January 1973 - February 1997

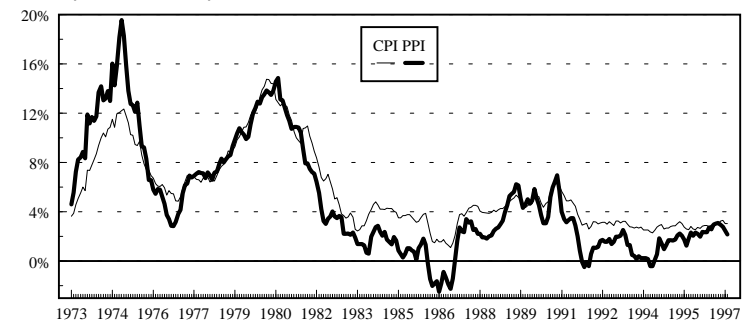


CHART 2.15  
**U.S. Economic Indicators**  
 January 1969 to February 1997, 1992=100

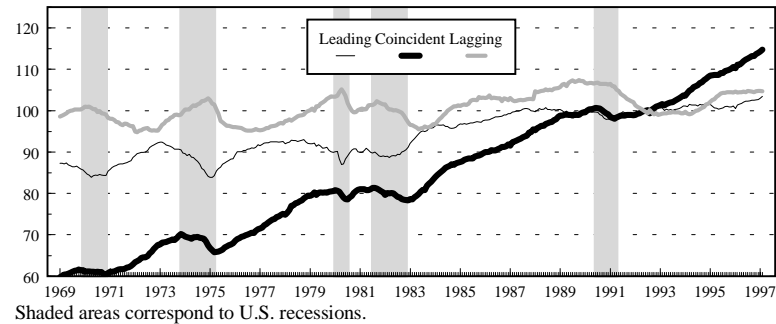


CHART 2.16  
**Employment Growth in Metropolitan Areas of Washington**  
 January 1996 - January 1997

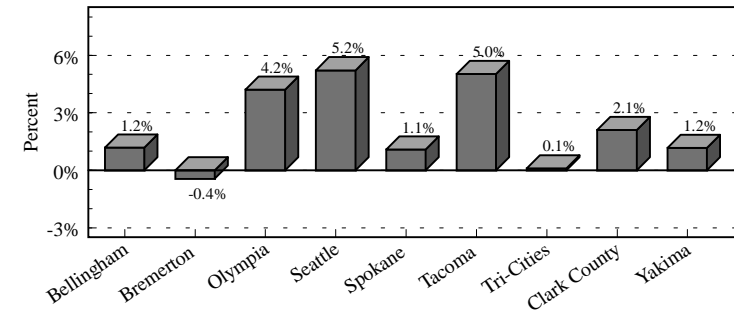


Table 2.1

**Washington Business Indicators**  
 Historical Data

	WA Index of Leading Indicators	U.S. Index of Leading Indicators	Seattle Index of Help-Wanted Advertising	U.S. Index of Help-Wanted Advertising	WA Purchasing Management Index	U.S. Purchasing Management Index
1994:1	101.5	101.2	94.9	77	43.6	56.6
1994:2	100.8	101.0	91.7	79	59.7	55.9
1994:3	100.6	101.5	84.3	80	60.6	56.2
1994:4	100.4	101.4	87.2	80	65.5	57.6
1994:5	100.8	101.4	93.1	83	58.5	57.5
1994:6	101.0	101.4	92.4	81	54.8	58.5
1994:7	101.5	101.2	100.8	85	54.5	58.3
1994:8	101.5	101.5	97.3	82	57.7	57.5
1994:9	101.9	101.4	100.9	83	63.5	59.2
1994:10	102.3	101.5	102.7	88	59.5	59.7
1994:11	102.0	101.6	104.7	87	57.2	59.9
1994:12	101.8	101.6	103.0	90	60.3	57.5
1995:1	102.2	101.5	110.0	88	51.6	57.9
1995:2	101.8	101.1	110.1	87	61.1	54.5
1995:3	102.1	100.7	109.4	85	61.0	51.4
1995:4	102.6	100.6	114.2	86	62.2	52.0
1995:5	101.8	100.4	109.3	80	61.8	46.1
1995:6	102.2	100.5	111.5	82	55.3	45.7
1995:7	101.7	100.7	113.2	85	60.1	50.5
1995:8	101.4	101.0	112.9	84	67.2	46.9
1995:9	101.3	101.1	115.3	83	58.7	46.6
1995:10	98.1	100.9	115.0	85	55.9	46.0
1995:11	98.1	100.9	114.1	82	63.4	46.0
1995:12	101.2	101.2	117.7	89	63.9	46.0
1996:1	100.7	100.5	115.9	85	53.1	44.2
1996:2	100.8	101.4	112.8	82	58.0	45.2
1996:3	102.1	101.6	124.7	84	54.3	46.9
1996:4	102.0	101.8	123.0	82	59.9	50.1
1996:5	102.1	102.1	123.5	80	63.2	49.3
1996:6	102.8	102.3	127.7	85	59.9	54.3
1996:7	102.7	102.3	124.1	83	55.4	50.5
1996:8	103.3	102.4	129.2	81	62.5	52.6
1996:9	103.8	102.5	130.6	84	73.9	51.7
1996:10	103.9	102.5	135.0	82	66.3	50.2
1996:11	104.7	102.6	150.6	87	64.1	52.4
1996:12	104.8	102.7	138.5	85	63.0	53.8
1997:1	104.8	103.0	147.4	87	52.2	52.0
1997:2	105.1	103.5	153.6	90	53.3	53.1

## Washington State Revenue Forecast Summary

The March 1997 General Fund-State revenue forecast for the 1995-97 and 1997-99 biennia was reduced \$52.2 million from what was expected in November. The entire reduction, however, is due to a \$58.7 million legislative change, which extends the 4.7 percent reduction to the state school levy, enacted in 1995, to taxes levied for collection in 1997. The change to the forecast in March, excluding legislation, totaled only \$6.5 million. The minor adjustment to the forecast in March, legislation aside, reflects the small change to the economic forecast. As in November, the March economic forecast anticipates a continued but moderate U.S. economic expansion and expects the Washington economy to outperform the nation, primarily as a result of the turnaround in the aerospace industry. Likewise, as in November, the March revenue forecast continues to expect moderate but steady revenue growth for the remainder of the 1995-97 biennium as well as for the 1997-99 biennium.

The revenue forecast for the 1995-97 biennium which ends June 30, 1997 was reduced \$38.1 million. Most of this change, \$32.3 million, reflects legislation reducing the state property tax levy. This legislation was enacted and signed into law shortly after the start of the 1997 legislative session. There was little change to the economic outlook for the 1995-97 biennium in March hence the change to the revenue forecast, excluding legislation, was small. The forecast for the current biennium was reduced \$5.8 million as weaker than expected collections since November, and a \$17 million reduction to the lottery forecast, more than offset the affect of a small improvement in the economic outlook. The forecast for the 1997-99 biennium was lowered \$14.1 million. This consisted of a \$26.4 million reduction due to property tax legislation, partially offset by a \$12.3 million increase due to a slight improvement to the economic forecast.

Table 3.1		Cash Basis	
Revision to the General Fund-State Forecast			
March 1997			
(Millions of Dollars)			
	1995-1997 Biennium	1997-1999 Biennium	Total
March 1997 Revenue Forecast			
Revision			
Legislation (EHB 1417)	(\$32.3)	(\$26.4)	(\$58.7)
Forecast Change	(5.8)	12.3	6.5
Total Change *	(\$38.1)	(\$14.1)	(\$52.2)
* Detail may not add due to rounding.			

The change to the forecast in March reduces the projected ending fund balance for the 1995-97 biennium to \$564.3 million from the \$602.4 million November figure. This is based on the post 1996 legislative session appropriation level of \$17.6 billion adjusted for fiscal 1996 reversions and the March 1997 revenue forecast. The March 1997 General Fund-State forecast of \$7,552.6 million remains below OFM's November 1996 official estimate of the Initiative 601 spending limit for the 1995-97 biennium of \$17,738.8 million. The March forecast for the 1997-99 biennium totals \$19,419.6 million. This is \$362.7 million above OFM's November estimate of the Initiative 601 spending limit of \$19,056.9 million for the 1997-99 biennium. Note, in accordance with sections 4 and 5 of Initiative 601, the expenditure limits for all fiscal years not yet complete are subject to revision for any revenue transfers or shifts in program costs adopted by the Legislature and the Governor.

## **Background and Assumptions**

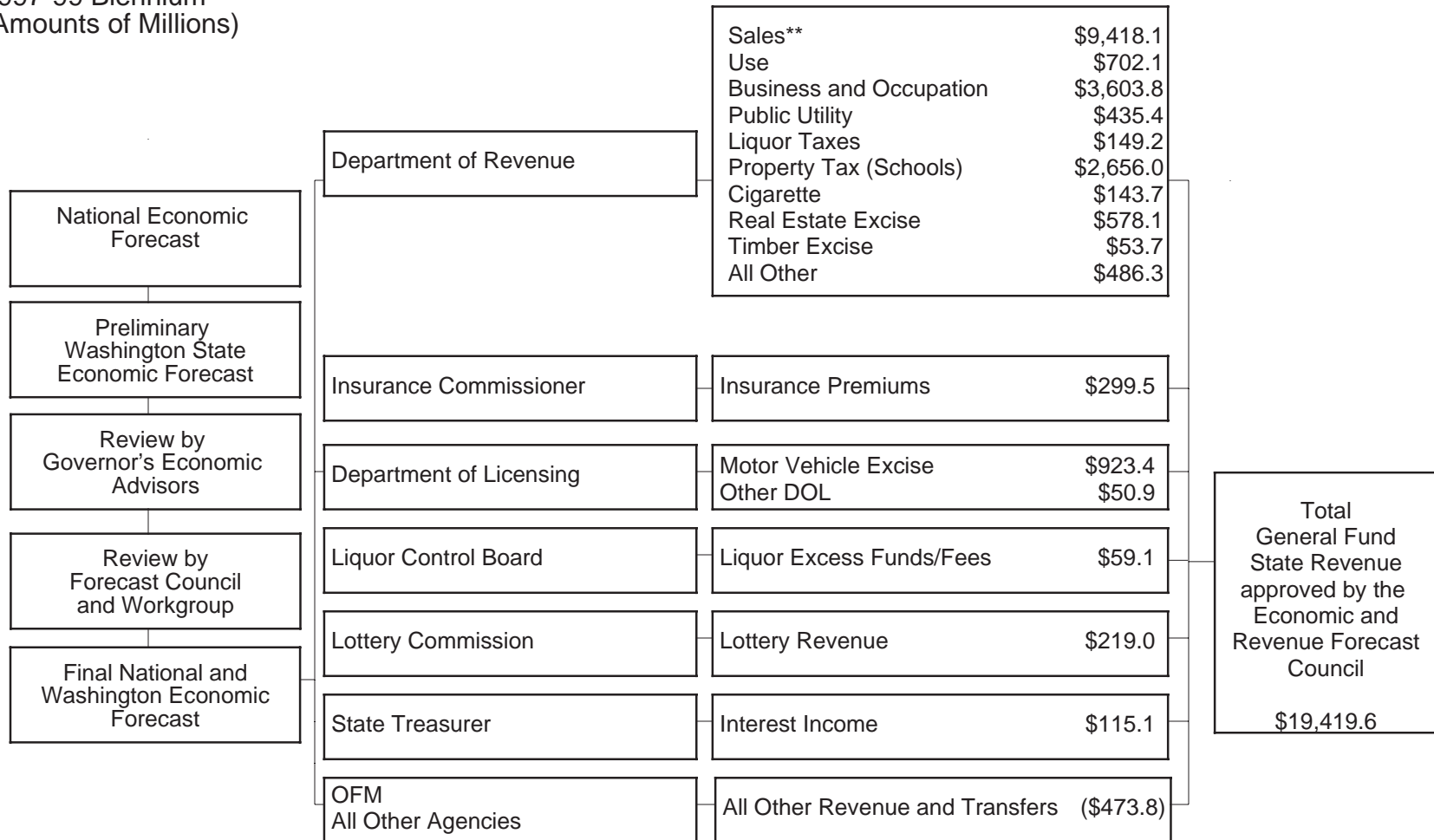
The Washington State General Fund-State revenue forecast is prepared quarterly in conjunction with the state economic forecast for the Economic and Revenue Forecast Council. The Economic and Revenue Forecast Council was created by Chapter 138, Laws of 1984, to provide an objective revenue forecast for both executive and legislative branches of state government. The Council consists of six members, two appointed by the Governor and two appointed by the Legislature from each caucus of the Senate and House of Representatives. Current members of the Economic and Revenue Forecast Council are listed inside the front cover of this publication. The General Fund-State revenue forecast is updated four times per year: March (February in even-numbered years), June, September, and November. Each state agency engaged in revenue collection is responsible for forecasting revenues it collects or administers. The staff of the Economic and Revenue Forecast Council is responsible for the preparation of the state economic forecast and the revenue forecast of the Department of Revenue's General Fund-State sources. The staff is also responsible for review and coordination of the revenue forecasts of agencies that collect relatively large amounts of General Fund-State revenue. These are the Department of Licensing, the Lottery Commission, the Insurance Commissioner's Office, the State Treasurer, the Liquor Control Board and the Office of Financial Management. The Office of Financial Management is responsible for summarizing the forecasts of all other state agencies which collect relatively smaller amounts of General Fund-State revenue as well as overseeing the tuition forecasts which are prepared by the various colleges and universities. For each quarterly update, the staff of the Economic and Revenue Forecast Council, under direction of the Executive Director, reviews (and if warranted, modifies) a national economic forecast prepared by Data Resources Incorporated (DRI). A state economic forecast is then prepared using an econometric model that links Washington's economy to the national economy. DRI's national forecast is the primary driver for the state economic forecast. After review by the Governor's Council of Economic Advisors, the economic forecast is used to prepare a baseline forecast of General Fund-State revenue. Agencies and the staff of the Forecast Council use the economic forecast, in conjunction with revenue models, to prepare a General Fund-State revenue forecast. The revenue forecasts for most major General Fund sources are prepared using econometric models which link the tax base of major General Fund taxes to the national and state economic forecast. A baseline revenue forecast, along with at least two alternative forecasts, is prepared for all General Fund-State sources and presented to the Forecast Council for approval. Once a forecast is approved by the Council it becomes the official forecast of General Fund-State revenue. An outline of the



Table 3.2

**Economic and Revenue Forecast Flow Chart\***

General Fund-State  
1997-99 Biennium  
(Amounts of Millions)



\* Cash Basis

\*\* Rental car sales tax is included in the vehicle excise tax total.

forecast process, including a summary of the baseline forecast for the 1997-99 biennium (cash basis) approved by the Forecast Council on March 20, 1997, is shown in Table 3.2.

### **March 1997 Forecast Assumptions**

1. The March 1997 forecast is based on current law and administrative practices. The March forecast was reduced by \$58.7 million to reflect the impact of EHB 1417 (Section 1) which reduces the state school levy by 4.7 percent for taxes due in 1997. Other legislation enacted into law during the 1997 session will be incorporated into the forecast in June.

2. The baseline revenue forecast for the 1995-97 and the 1997-99 biennia is based upon the economic forecast presented in Chapter 1 of this publication. The outlook for the state's economy and revenue is in part based on DRI's February 1997 control forecast for the U.S.

3. There are several legal challenges to various aspects of the state's tax laws or administration. Most of these actions are in litigation and are either unresolved or are on appeal. Any impact on General Fund-State receipts will not be incorporated into the General Fund-State forecast until the issue has been fully resolved.

4. Beginning April 10, 1997 the tobacco products tax will be levied on the tobacco wholesaler rather than the manufacturer.

5. There are some non-economic assumptions affecting General Fund-State revenues embedded in the forecast for the 1995-97 biennium. Some of these are summarized below.

- ◆ Beginning July 1992, higher education tuition and fees are no longer part of the state General Fund. Instead, revenues from tuition and fees are placed in the operating funds of the individual colleges and universities. Because of this change, tuition and fees are included in only one year of the 1991-93 biennium General Fund-State revenue total and are excluded from the 1993-95, 1995-97, and 1997-99 biennial totals. The legislation enacting this change stipulates that the tuition and fee forecast is still to be reviewed by the Economic and Revenue Forecast Council. Pursuant to this, we have included the tuition forecast separately in Table 3.16.
- ◆ There have been several legislative and other non-economic changes which affected actual receipts for the 1991-93 and the 1993-95 biennia as well as the forecast for the 1995-97 and 1997-99 biennia. Actual General Fund-State receipts for the 1991-93 biennium include \$179 million due to legislation. The 1993-95 biennium total has been increased by a net \$330 million as a result of action by the Legislature. The forecast for the 1995-97 biennium has been reduced \$671 million due to legislation.

### **Recent Collection Experience**

General Fund-State collections were \$21.2 million, 0.7 percent, below the forecast in the four months since the last forecast. More than half of the shortfall (\$11.4 million) is due to much weaker than expected lottery sales. Excluding the lottery, collections were only \$9.8 million (0.3 percent) below the estimate since the November forecast. Revenue Act taxes, the state's major excise taxes (retail sales, business and occupation, use, public utility, and tobacco products taxes), were \$18.5 million less than expected. Other taxes collected by the Department of Revenue were \$14.1 million

Table 3.3

**Collection Variance**

November 11 - March 10, 1997

Based on November 1996 Forecast

(Millions of Dollars)

<b>Agency</b>	<b>Collection Variance</b>	<b>Percent of Estimate</b>
Department of Revenue		
Revenue Act*	(\$18.5)	(0.8%)
Non Revenue Act**	<u>14.1</u>	<u>2.1</u>
Subtotal	(\$4.4)	(0.2%)
Department of Licensing**	(\$5.4)	(3.9%)
Lottery Commission**	(11.4)	(26.0%)
Total	(\$21.2)	(0.7%)

\* Revenue Act taxes consist of retail sales, business and occupation, use, public utility, and tobacco products taxes as well as penalty and interest receipts. Variance based on collections November 11 - March 10, 1997.

\*\* Variance based on collections from November 1996 to February 1997. Major Non Revenue Act taxes in this category include: state property tax levy, real estate excise tax and estate tax.

above expectations. Collections reported by the Department of Licensing, primarily motor vehicle excise tax receipts, were \$5.4 million below the forecast during the past four months.

The relatively small aggregate collection variance in the November 11 through March 10 collection period (October 1996 through January 1997 business activity for major excise taxes) indicates the state's economy and revenue collections are behaving about as expected. The only real surprise was the pattern of revenue growth over the last four months. Unexpected weakness in the fourth quarter produced a large shortfall at the end of December (\$47.8 million) which was partially offset by a strong rebound in January. Weather may have been a factor, with an unusually severe winter

storm in late December possibly shifting some activity from December to January. Revenue Act collections were up 5.1 percent (adjusted for the impact of tax law changes) in the fourth quarter, down slightly from the third quarter's 5.8 percent and well below the 6.8 percent growth of income. Fourth quarter Revenue Act growth was as high as it was, however, only because of a strong, 9.6 percent, increase in October. Revenue Act growth averaged only 4.4 percent in November and December, producing the large, \$47.8 million Revenue Act shortfall. However, Revenue Act receipts rebounded strongly in January. Collections based on January activity were up more than 12 percent, reducing the Revenue Act collection shortfall to \$18.5 million. Revenue Act collections in the last three month period (November to January) were a healthy 6.5 percent above a year ago, about the same as the average for the first four months of the fiscal year (July-October) and pretty much consistent with income growth. It is too early to tell if the acceleration of growth in January is simply a rebound from the disappointing November-December period or if it signals a period of stronger growth.

Preliminary data on excise taxes paid on the combined excise tax return last month indicated a strong rebound by the retailing sector, with all two-digit SIC sectors, with the exception of general merchandise and food stores, posting double-digit increases. Most non retailing sectors, were also strong especially, manufacturing, construction and services. Retailing was led by building materials, hardware and garden stores and the miscellaneous retailing sector (drug stores, sporting goods, toys, jewelry stores etc.).

Other General Fund taxes collected by the Department of Revenue were \$14.1 million above the estimate for the four months since the November forecast. Several tax sources contributed to this variance including liquor taxes, \$1.5 million above the estimate, property (state levy), \$5.1 million above the forecast, the estate tax, \$4.2 million higher than expected and the real estate excise tax, \$2.5 million above the forecast.

Real estate excise activity accelerated in the four months since the November forecast. State-wide taxable real estate excise activity has increased 17 percent over the last four months based on closings reported by the counties October through January (reflecting General Fund collections, November through February). This is up from 8 percent for the first three months of the fiscal year. Most of the growth has been due to an increase in value. The number of transactions have shown only slight improvement, with the number of transactions in the last four months up only 1 percent from the year-ago level after declining 0.8 percent in the first three months of fiscal 1997. Growth appears to be concentrated in the a few areas of the state. In Clark county, the state's hottest region, taxable real estate activity was 27.7 percent above the year-ago level in the past four months, up from a 22.5 percent increase the previous three months. In King county real estate activity was 28.8 percent higher than the year earlier during the last four months, up from 9.5 percent during the July-September period. Snohomish county was also strong, however, Pierce and Spokane counties were weak. In Pierce county, taxable real estate activity declined 2.5 percent in the October-January period after having increased only 3.9 percent the prior three months. In Spokane county, taxable real estate excise activity declined 2 percent on average in the last four months after increasing 7.8 percent in the first three months of fiscal 1997.

General Fund-State taxes collected by the Department of Licensing, primarily motor vehicle excise tax revenue, were \$5.4 million below the November forecast . During the last four months collections were 6.5 percent above the year-ago level. The Lottery Commission's General Fund deposits were \$11.4 million below the November forecast during the latest four months, accounting for the majority of the collection shortfall since the November forecast. Weak lotto sales, primarily due to lack of a large lotto jackpot, was a major factor in the weaker than expected transfers. In this period, Lottery General Fund deposits were 5.6 percent below the year-ago level; for the first seven months of fiscal 1997 lottery General Fund transfers were 3.5 percent below last year's pace. Table 3.3 summarizes General Fund-State collection experience since the November forecast.

## **The Forecast for 1995-97 and 1997-99 Biennia**

There is little change to the revenue outlook from November. The March 1997 economic forecast continues to expect a continuation of moderate economic growth for the remainder of the this biennium and the next. The continuation of the national expansion, along with improvement in the state's aerospace outlook will enable the state's economy and revenue to continue to grow. The expanding work force at Boeing signals the beginning of the expansionary phase of the aerospace cycle. Washington's economy tends to outperform the U.S. economy when the aerospace sector is expanding and General Fund-State revenue tend to grow more rapidly when the state's economy is strong. The March forecast for General Fund-State revenue remains consistent with this positive and improving economic environment. The General Fund-State forecast for the 1995-97 biennium now totals \$17,552.6 million, \$988 million above the 1993-95 biennium. This is an increase of 6.0 percent (1.4 percent adjusted for inflation). The relatively weak growth is due largely to tax law changes which are expected to significantly lower 1995-97 tax receipts. Legislation enacted in 1994, 1995 and in 1996 has reduced expected revenue in the 1995-97 biennium by a total of \$638 million. Excluding the impact of legislation, General Fund-State revenue is expected to grow 10.3 percent in the 1995-97 biennium.

Although revenue growth during the first half of the 1995-97 biennium was sluggish, given the strong economic environment, much of the weakness occurred early in the biennium when total

employment growth was weak and before Boeing's announcement of its intention to increase production and employment. Revenue growth improved noticeably beginning with the first quarter of 1996. Second quarter revenue growth, although weaker than in the first quarter, was better than during the first six months of the biennium and growth improved in the third quarter of 1996. Growth slowed a little in the fourth quarter of 1996 rather than accelerating as expected in the November forecast. A severe winter storm in December likely played a part in slowing activity, however, weakness in several areas of the state, including the Tri-Cities, Spokane and several timber counties was also likely a factor, partially offsetting very strong growth in Clark county, and in the Puget Sound area, especially King county. Revenue Growth appears to have rebounded strongly in January. Overall economic activity is expected to remain healthy, driven by stronger employment and income growth for the remainder of this biennium. This will ensure spending and revenue growth will also remain healthy.

The outlook for General Fund-State receipts for the 1997-99 biennium (July

1, 1997 - June 30, 1999) also continues to be positive. General Fund-State receipts are now expected to total \$19,419.6 million in the 1997-99 biennium. This is \$1,867 million, 10.6 percent higher than the forecast for the 1995-97 biennium. Like the prior three biennia, revenue growth for the 1997-99 biennium is distorted by several tax law changes. These include: the expiration of the business and occupation tax surtax on July 1, 1997, the start of the 1997-99 biennium, a 2 percent insurance premiums tax on health maintenance organizations and health care service contractors which is included in General Fund-State revenue for part of the 1995-97 biennium but not in the 1997-99 biennium and 1996 legislation, (primarily the broadening of the sales tax exemption for manufacturers) which reduces revenue for only one year of the 1995-97 biennium but both years of the 1997-99 biennium. These three changes reduce the level of 1997-99 General Fund-state revenue vis-à-vis the level of revenue for 1995-97, resulting in a lower rate of growth had these changes not occurred. Partially offsetting the impact on growth of these changes is a 4.7 percent property tax reduction affecting both years of the 1995-97 biennium, but only one fiscal year of the 1997-99

Table 3.4  
**General Fund-State Collections \***  
Cash Basis  
(Millions of Dollars)

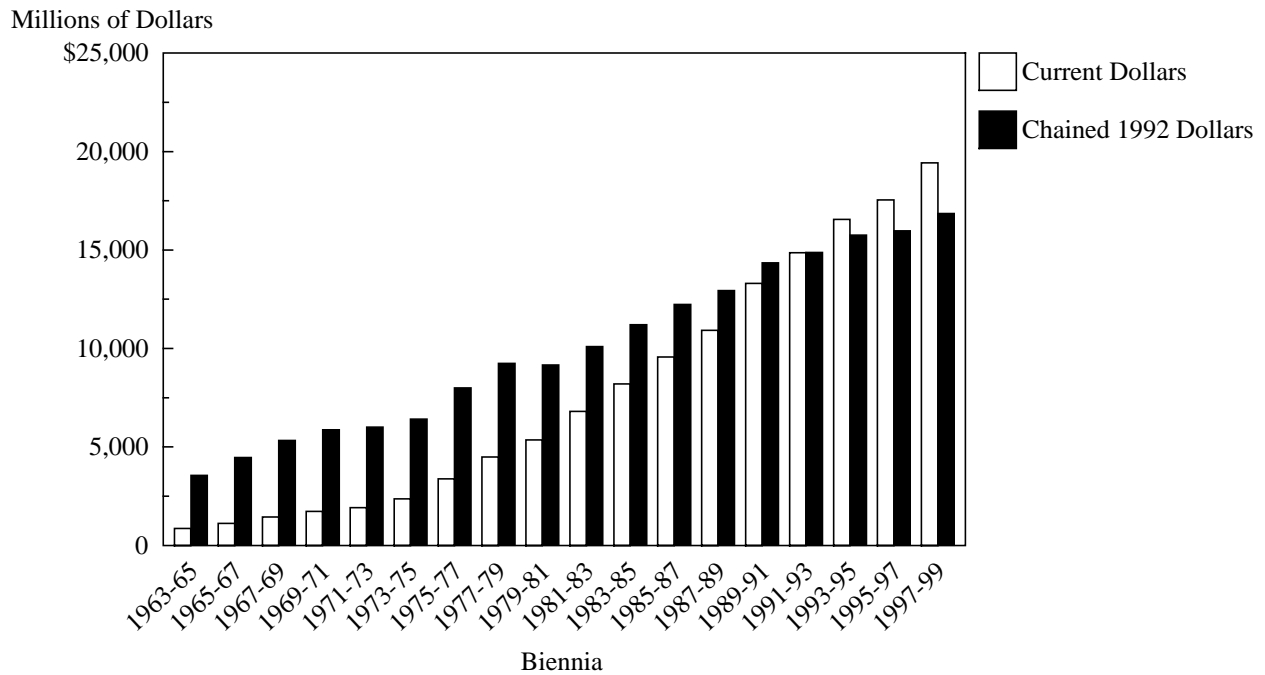
Biennium	Current Dollars*	Percent Change	1992 Chained Dollars	Percent Change
1961-63	\$817.1		\$3,447.7	
1963-65	866.2	6.0	3,564.6	3.4%
1965-67	1,128.6	30.3	4,460.9	25.1
1967-69	1,440.5	27.6	5,330.2	19.5
1969-71	1,732.7	20.3	5,878.5	10.3
1971-73	1,922.1	10.9	6,013.6	2.3
1973-75	2,372.4	23.4	6,424.9	6.8
1975-77	3,395.0	43.1	7,997.6	24.5
1977-79	4,490.0	32.3	9,250.6	15.7
1979-81	5,356.6	19.3	9,170.3	-0.9
1981-83	6,801.5	27.0	10,102.5	10.2
1983-85	8,202.3	20.6	11,213.0	11.0
1985-87	9,574.6	16.7	12,249.6	9.2
1987-89	10,934.1	14.2	12,941.7	5.6
1989-91	13,308.9	21.7	14,343.5	10.8
1991-93	14,862.2	11.7	14,875.2	3.7
1993-95	16,564.6	11.5	15,753.3	5.9
1995-97 <sup>F</sup>	17,552.6	6.0	15,978.7	1.4
1997-99 <sup>F</sup>	19,419.6	10.6	16,857.3	5.2

<sup>F</sup> March 1997 Forecast.

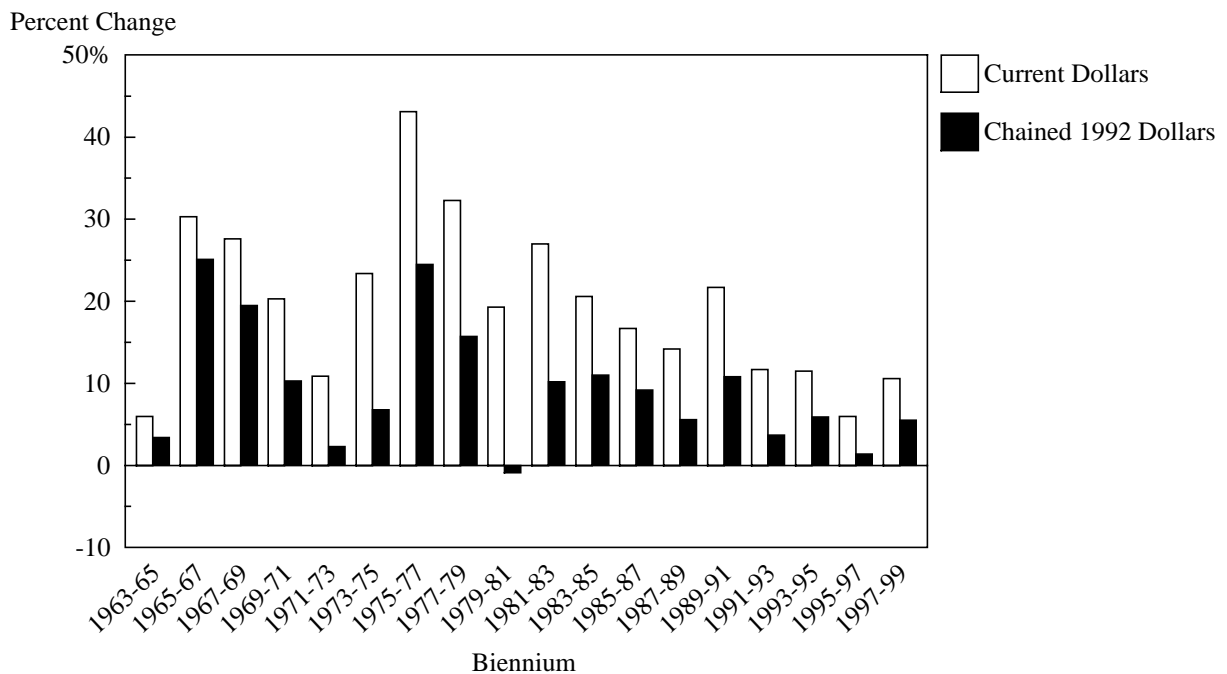
\* Total General Fund-State collections-cash receipts basis. Includes rate, base and administrative changes; Modified Cash Basis: 1985-87 & prior; pure cash basis: 1987-89 and after. Changes among biennia may not be comparable because the biennial revenue totals shown here include the impact of rate, base and administrative changes on total collections.

Source: Department of Revenue and the Office of Financial Management. Office of the Forecast Council's March 1997 forecast.

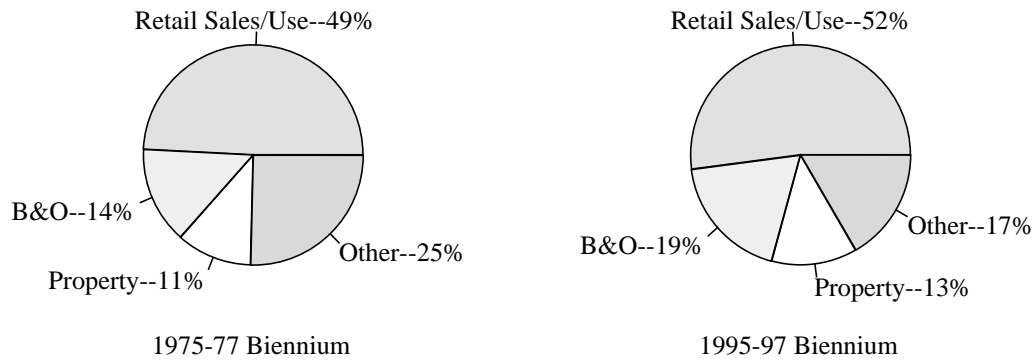
**Chart 3.1**  
**General Fund-State Revenue**



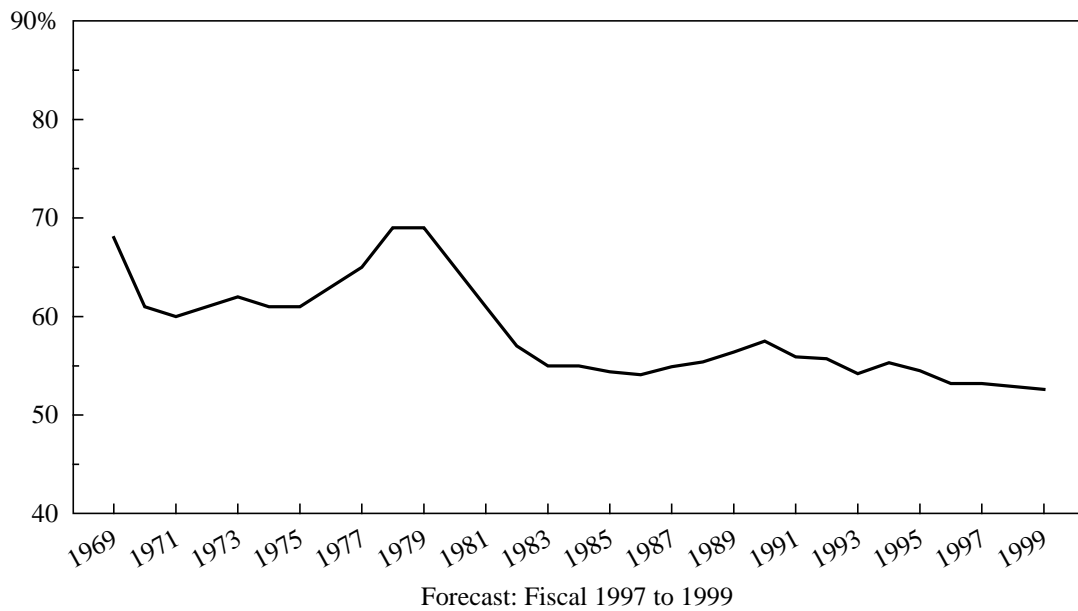
**Chart 3.2**  
**General Fund-State Revenue**



**Chart 3.3**  
**Composition of General Fund-State Revenue**



**Chart 3.4**  
**Taxable Sales\* as a Percent of Personal Income**  
 Fiscal Years



\* Adjusted Base



biennium. The growth of General Fund-State revenue for 1997-99 adjusting for these tax law changes is 11.6 percent.

Legislation aside, revenue growth is dictated by the economic forecast. The economic environment for the 1997-99 biennium is about the same as assumed in November and is perhaps the best since the 1989-91 biennium. A steadily expanding U.S. economy and an expanding aerospace sector is expected to produce solid employment and income gains in the 1997-99 biennium. Revenue is expected to grow along with the economy. Major revenue sources are expected to remain near their long run averages relative to growth in income and employment.

Washington has no personal or corporate income tax. Three taxes, sales and use, business and occupation and the property tax (state school levy) account for the majority of Washington's total General Fund-State revenue. These three taxes are expected to account for more than 83 percent of the \$17.6 billion total General Fund-State cash receipts in the 1995-97 biennium and more than 84 percent of the 1997-99 biennium's \$19.4 billion total. The state's reliance on sales, business and occupation, and property taxes has increased over time, rising from 80 percent in the 1991-93 biennium and from 75 percent twenty years ago. The retail sales and use tax, the state's largest revenue source, is projected to generate \$9.1 billion, 52.1 percent of total revenue in the 1995-97 biennium. The business and occupation tax and the property tax are expected to total \$3.3 billion (18.7 percent of the total) and \$2.2 billion (12.6 percent of the total) respectively. The property tax's (state school levy) share of the total rises to 13.7 percent in the 1997-99 biennium and the business and occupation tax's share drops to 18.6 percent of the total reflecting the expiration of the 4.5 percent B&O surtax at the end of the 1995-97 biennium and the expiration of the 4.7 percent reduction to the state levy.

The sales tax base is expected to increase 5.1 percent in fiscal 1997, after having increased 4.9 percent in fiscal 1995 and only 1.4 percent in fiscal 1996. Taxable sales growth in the third quarter, the latest available data, was a little better than expected, increasing 3.9 percent from the year-ago level. The retail sector, which accounts for about

Table 3.5  
**Taxable Retail Sales\***  
March 1997 Forecast  
(Millions of Dollars)

Fiscal Year	Amount	Percent Change
1971	\$8,748	1.6%
1972	9,545	9.1
1973	10,646	11.5
1974	11,877	11.6
1975	13,380	12.7
1976	15,493	15.8
1977	17,626	13.8
1978	21,121	19.8
1979	22,309	5.6
1980	24,057	7.8
1981	25,197	4.7
1982	26,097	3.6
1983	29,368	12.5
1984	29,156	-0.7
1985	30,687	5.3
1986	32,158	4.8
1987	34,647	7.7
1988	37,452	8.1
1989	41,429	10.6
1990	47,183	13.9
1991	49,812	5.6
1992	53,189	6.8
1993	55,319	4.0
1994	59,009	6.7
1995	61,927	4.9
1996	62,817	1.4
1997 <sup>F</sup>	66,005	5.1
1998 <sup>F</sup>	69,731	5.7
1999 <sup>F</sup>	73,266	5.1

<sup>F</sup> Forecast

\* Actual base. Includes statutory and administrative changes to the tax base. Historical fiscal year data are from quarterly taxable sales reported by taxpayers on the state's Combined Excise Tax return. Major base changes include: exemption of off-premises food in 1978:3 (fiscal 1979); extension of the sales tax base to off-premises food 1982:2 to 1983:2; food again exempt 1983:3 (fiscal 1984). Base extended to some personal services, effective July 1993. Some personal services are exempt effective July 1994. Exemption of manufacturing equipment effective fiscal 1996. Additional sales tax exemptions (including an exemption for R&D equipment) enacted effective fiscal 1997. Change in reporting effective fiscal 1997.



half of all taxable sales, increased 5.2 percent in the third quarter, led by general merchandise and apparel retailers' 7.3 percent increase. Auto dealers and gasoline retailers were up 5.5 percent, however, furniture and household equipment retailers saw only 1.9 percent increase in activity in the third quarter. Most non retailing sectors showed modest growth in the third quarter, exceptions included a double digit increase in the heavy construction sector and a decline in the transportation, communications and utilities sector. Taxable sales collected by service establishments was up 1.7 percent in the third quarter, the first increase since the second quarter of 1995, led by a 10.8 percent increase in auto repair services.

Although the strongest third quarter growth was in Kittitas, Skamania and Whittman counties (all posting double digit growth), strength in general appears to be shifting away from the smaller, rural counties to the larger, urban counties. King, the state's largest county as well as Clark (the fastest growing county since 1984) have been especially strong recently. In the third quarter, Clark county's taxable sales growth was 7.4 percent and King's was 6.4 percent. For the first three quarters of 1996, total taxable sales in King county averaged 4.5 percent compared to only 1.1 percent for the rest of the state. For comparison, taxable sales in Spokane county were up 2.5 percent in the first three quarters of 1996 compared to 1995, while taxable sales were up 2.3 percent in Snohomish county and only 1.4 percent in Pierce county in this period. Other areas of the state were noticeably worse: Benton county taxable sales declined 5.1 percent for the first three quarters of calendar 1996, while Franklin county showed no growth; Grays Harbor county was down 4.2 percent during this period and Whatcom county increased only 0.1 percent.

The rebound to the taxable sales forecast for fiscal 1997 is predicated upon an improving economy. Early indications based on collections in the fourth quarter are that taxable sales increased about 5.2 in the fourth quarter, slightly less than expected in November. Preliminary collection data based on January activity, however, indicate a strong rebound in activity. Although it is still too early to attribute the strong growth to a particular tax source, stronger tax receipts along with a higher personal income and employment forecast support a strong taxable sales outlook for the remainder of fiscal 1997. Despite the significantly higher growth of taxable sales in fiscal 1997 vis-à-vis fiscal 1996, the forecast for fiscal 1997 taxable sales still understates the level of economic activity. This is due to a combination of legislative changes enacted during the 1996 session and a change in reporting of business activity by a major taxpayer (beginning in fiscal 1997, a taxpayer is reporting activity previously reported as taxable sales as a use tax assessment payment). The combined impact of these factors reduce the growth of taxable sales by about 1.7 percent for fiscal 1997. There has been little change to the outlook for taxable sales growth for the 1997-99 biennium. Taxable sales activity is projected to increase 5.7 percent in fiscal 1998, a slight increase from what was expected in November. Taxable sales growth is expected to decelerate in fiscal 1999 to 5.1 percent, slightly less than what was expected in November. Growth remains consistent with the long run relationship between the growth of taxable sales and state personal income.

### **Forecast Change for 1995-97 and the 1997-99 Biennia**

The March 1997 forecast was reduced \$52.2 million from the November forecast, \$38.1 million for the 1995-97 biennium and \$14.1 million for the 1997-99 biennium. The major change to the General Fund-State forecast in March, however, was the incorporation of the impact of a tax law change into forecast. This legislation, EHB 1471, lowers the state levy for taxes due in 1997 by 4.7 percent and reduces the forecast by a total of \$58.7 million for both biennia. Legislation aside, the

Table 3.6  
**Summary Changes to the General Fund-State Forecast**  
 March 1997 Cash Forecast  
 (Millions of Dollars)

Change Between November 1996 and March 1997 Forecasts		
<b>1995-97 Biennium</b>		
Collection Experience <sup>1</sup>		(\$21.2)
Department of Revenue	(\$4.4)	
Department of Licensing/Lottery	(16.8)	
Non Economic Changes		(\$27.1)
Legislation (EHB 1417)	(\$32.3)	
Other	5.2	
Forecast Change (Remainder of Biennium)		\$10.2
Department of Revenue	6.7	
Other Agencies	3.5	
<b>1997-99 Biennium</b>		
Forecast Change		(\$2.0)
Department of Revenue	38.8	
Lottery Commission	(34.0)	
Other Agencies	(6.8)	
Non Economic Change		
Legislation (EHB 1417)	(\$26.4)	(\$12.1)
Other	14.3	
Total Change: 1995-97 and 1997-99		
Biennia		<u>(\$52.2)</u>

\* Retail sales, B&O, use, public utility and tobacco products taxes.

\*\* Detail may not add because of rounding.

<sup>1</sup> Collection experience as of March 10, 1997, for major taxes; as of February 1997 for other Department of Revenue, Department of Licensing, and Lottery Commission.

total change to the forecast was a small, essentially a “no-change” forecast with the General Fund-state cash receipts forecast for the 1995-97 and 1997-99 biennia only \$6.5 million higher than in November 1996. A modest increase to the forecast due to continuation of the current economic expansion, along with an \$18.9 million increase due to non-economic factors, was partially offset the weaker collection experience during the four months since the November forecast and a major reduction to the lottery forecast.

Table 3.6 summarizes changes to the cash forecast in March by type of change. Tables 3.7 through 3.10 summarize revisions to the 1995-97 and 1997-99 biennia by agency. Tables 3.7 and 3.9 are on a cash basis and Tables 3.8 and 3.10 are on a GAAP basis. Table 3.11 provides fiscal year estimates by major revenue source (cash basis). Below is a brief summary of the changes to the General Fund-State forecast by agency.

## Department of Revenue

The Department of Revenue collects and administers the majority of General Fund-State revenue, accounting for 93 percent of the total General Fund. There was little change in forecast of revenue sources administered by the Department of Revenue in March. The Department of Revenue’s cash forecast was increased \$1.9 million, a \$24.8 million reduction due to the outlook for fiscal 1997 (the 1995-97 biennium) was a little more than offset by a \$26.7 million increase for the 1997-99 biennium. In spite of weakness in the fourth quarter of 1996, the forecast was increased \$41.1 million due to expectations of a healthy and an improving economy. The current biennium was increase \$2.3 million and next biennium was raised \$38.8 million. The forecast for the current biennium was increased despite collection experience in which tax receipts the past four months were \$4.4 million below expectations. For the current biennium weaker than expected sales and

Table 3.7

Cash Basis

**General Fund-State Forecast by Agency**

Comparison of the March 1997 Forecast to the November 1996 Forecast

1995-1997 Biennium

(Millions of Dollars)

<b>Forecast by Agency</b>	<b>November 1996 Forecast <sup>1</sup></b>	<b>Non-Economic Changes <sup>2</sup></b>	<b>Forecast Revision</b>	<b>March 1997 Forecast</b>	<b>Total Change</b>
<b>Department of Revenue</b>					
Retail Sales*	\$8,535.9		(\$11.2)	\$8,524.7	(\$11.2)
Business and Occupation Use	3,293.4		(15.0)	3,278.5	(15.0)
Public Utility	612.2		4.8	617.0	4.8
Liquor Sales/Liter	392.0		0.1	392.1	0.1
Cigarette	145.2		2.5	147.6	2.5
Property (State Levy)	141.1		0.3	141.4	0.3
Real Estate Excise	2,238.4	(32.3)	5.8	2,211.9	(26.5)
Timber Excise	515.9		8.0	523.8	8.0
Other	55.2		(1.3)	53.9	(1.3)
Subtotal	482.0	5.2	8.4	495.7	13.6
	16,411.4	(27.1)	2.3	16,386.6	(24.8)
<b>Department of Licensing**</b>					
Motor Vehicle Excise	805.0		(5.7)	799.3	(5.7)
Other	45.3		(0.1)	45.2	(0.1)
<b>Insurance Commissioner</b>					
Insurance Premiums	311.7		0.0	311.7	0.0
<b>Liquor Control Board</b>					
Liquor Profits and Fees	54.6		0.7	55.3	0.7
Beer and Wine Surtax	2.9		0.0	2.9	0.0
<b>Lottery Commission</b>					
Lottery Revenue	221.3		(17.0)	204.3	(17.0)
<b>State Treasurer</b>					
Interest Earnings	138.7		2.7	141.3	2.7
<b>Office of Financial Management</b>					
Other	(400.1)		6.1	(394.0)	6.1
<b>Total General Fund-State***</b>	<b><u>\$17,590.7</u></b>	<b><u>(\$27.1)</u></b>	<b><u>(\$11.0)</u></b>	<b><u>\$17,552.6</u></b>	<b><u>(\$38.1)</u></b>

<sup>1</sup> Adopted by the Forecast Council November 1996.<sup>2</sup> Includes the impact of EHB 1417 (a \$32.3 million reduction to the state levy for taxes due in 1997), a \$1.3 million increase in the tobacco products tax due to an administrative change, and a \$3.9 million payment in lieu of taxes by the Federal government related to its presence at Handford.

\* Includes the General Fund-State portion of the Rental Car tax in fiscal 1996.

\*\* Includes the General Fund-State portion of the Rental Car tax in fiscal 1997.

\*\*\* Detail may not add to totals because of rounding.

Table 3.8

GAAP Basis

**General Fund-State Forecast by Agency**

Comparison of the March 1997 Forecast to the November 1996 Forecast

1995-1997 Biennium

(Millions of Dollars)

Forecast by Agency	November 1996 Forecast <sup>1</sup>	Economic Changes <sup>2</sup>	Forecast Revision	March 1997 Forecast	Total Change
<b>Department of Revenue</b>					
Retail Sales	\$8,541.0		(\$4.2)	\$8,536.8	(\$4.2)
Business and Occupation Use	3,309.1		(8.1)	3,300.9	(8.1)
Public Utility	608.1		5.5	613.6	5.5
Liquor Sales/Liter	396.7		0.3	397.0	0.3
Cigarette	144.8		2.5	147.3	2.5
Property (State Levy)	140.9		0.3	141.2	0.3
Real Estate Excise	2,240.7	(32.3)	6.2	2,214.6	(26.1)
Timber Excise	539.6		(16.4)	523.2	(16.4)
Other	55.2		(1.3)	53.9	(1.3)
Subtotal	489.4	5.2	7.3	501.9	12.5
	16,465.4	(27.1)	(7.8)	16,430.5	(34.9)
<b>Department of Licensing</b>					
Motor Vehicle Excise*	805.7		(5.7)	800.0	(5.7)
Other	45.1		(0.1)	45.0	(0.1)
<b>Insurance Commissioner</b>					
Insurance Premiums	311.8	0.0	311.8	0.0	4.5
<b>Liquor Control Board</b>					
Liquor Profits and Fees	54.6	0.7	55.3	0.7	0.7
Beer and Wine Surtax	2.9		0.0	2.9	0.0
<b>Lottery Commission</b>					
Lottery Revenue	222.4		(17.0)	205.4	(17.0)
<b>State Treasurer</b>					
Interest Earnings	137.9		2.2	140.1	2.2
<b>Office of Financial Management</b>					
Other	(398.8)		5.3	(393.5)	5.3
Total General Fund-State**	<u>\$17,647.0</u>	<u>(\$27.1)</u>	<u>(\$22.4)</u>	<u>\$17,597.5</u>	<u>(\$49.5)</u>

1 Adopted by the Forecast Council November 1996.

2 Includes the impact of EHB 1417 (a \$32.3 million reduction to the state levy for taxes due in 1997), a \$1.3 million increase in the tobacco products tax due to an administrative change, and a \$3.9 million payment in lieu of taxes by the Federal government related to its presence at Handford.

\* Includes the General Fund-State portion of the Rental Car tax in fiscal 1996.

\*\* Includes the General Fund-State portion of the Rental Car tax in fiscal 1997.

\*\* Detail may not add to totals because of rounding.

Table 3.9

Cash Basis

**General Fund-State Forecast by Agency**

Comparison of the March 1997 Forecast to the November 1996 Forecast

1997-1999 Biennium

(Millions of Dollars)

<b>Forecast by Agency</b>	<b>November 1996 Forecast <sup>1</sup></b>	<b>Economic Changes <sup>2</sup></b>	<b>Forecast Revision</b>	<b>March 1997 Forecast</b>	<b>Total Change</b>
<b>Department of Revenue</b>					
Retail Sales	\$9,403.2		\$14.9	\$9,418.1	\$14.9
Business and Occupation	3,595.5		8.3	3,603.8	8.3
Use	703.0		(1.0)	702.1	(1.0)
Public Utility	438.4		(3.0)	435.4	(3.0)
Liquor Sales/Liter	143.4		5.8	149.2	5.8
Cigarette	141.9		1.8	143.7	1.8
Property (State Levy)	2,677.4	(26.4)	5.0	2,656.0	(21.5)
Real Estate Excise	572.4		5.8	578.1	5.8
Timber Excise	51.7		2.0	53.7	2.0
Other	472.7	14.3	(0.8)	486.2	13.5
Subtotal	18,199.7	(12.2)	38.8	18,226.4	26.7
<b>Department of Licensing</b>					
Motor Vehicle Excise*	921.6		1.8	923.4	1.8
Other	51.1		(0.2)	50.9	(0.2)
<b>Insurance Commissioner</b>					
Insurance Premiums	299.5		0.0	299.5	0.0
<b>Liquor Control Board</b>					
Liquor Profits and Fees	50.4		5.7	56.2	5.7
Beer and Wine Surtax	2.9		0.0	3.0	0.0
<b>Lottery Commission</b>					
Lottery Revenue	253.0		(34.0)	219.0	(34.0)
<b>State Treasurer</b>					
Interest Earnings	118.5		(3.4)	115.1	(3.4)
<b>Office of Financial Management</b>					
Other	(463.0)		(10.8)	(473.8)	(10.8)
Total General Fund-State**	<u>\$19,433.7</u>	<u>(\$12.2)</u>	<u>(\$2.0)</u>	<u>\$19,419.6</u>	<u>(\$14.1)</u>

<sup>1</sup> Adopted by the Forecast Council November 1996.

<sup>2</sup> Includes the impact of EHB 1417 (a \$26.4 million reduction to the state levy for taxes due in 1997), a \$13.3 million increase in the tobacco products tax due to an administrative change, and a \$1.0 million payment in lieu of taxes from the Federal government related to its presence at Handford.

\* Includes the General Fund-State portion of the rental car tax.

\*\* Detail may not add to totals because of rounding.

Table 3.10

GAAP Basis

**General Fund-State Forecast by Agency**

Comparison of the March 1997 Forecast to the November 1996 Forecast

1997-1999 Biennium

(Millions of Dollars)

Forecast by Agency	November 1996 Forecast <sup>1</sup>	Economic Changes <sup>2</sup>	Forecast Revision	March 1997 Forecast	Total Change
<b>Department of Revenue</b>					
Retail Sales	\$9,455.6		\$15.3	\$9,470.9	\$15.3
Business and Occupation	3,619.9		8.3	3,628.2	8.3
Use	705.5		(1.0)	704.6	(1.0)
Public Utility	438.3		(3.0)	435.3	(3.0)
Liquor Sales/Liter	142.8		6.1	148.9	6.1
Cigarette	141.1		1.8	142.9	1.8
Property (State Levy)	2,677.4	(26.4)	4.9	2,656.0	(21.5)
Real Estate Excise	577.1		5.7	582.8	5.7
Timber Excise	51.7		2.0	53.7	2.0
Other	473.2	14.3	(0.8)	486.7	13.5
Subtotal	18,282.5	(12.1)	39.4	18,309.8	27.3
<b>Department of Licensing</b>					
Motor Vehicle Excise*	916.0		1.8	917.8	1.8
Other	49.8		(0.3)	49.5	(0.3)
<b>Insurance Commissioner</b>					
Insurance Premiums	299.5		0.0	299.5	0.0
<b>Liquor Control Board</b>					
Liquor Profits and Fees	50.4		5.7	56.2	5.7
Beer and Wine Surtax	3.0		(0.0)	3.0	(0.0)
<b>Lottery Commission</b>					
Lottery Revenue	253.0		(34.0)	219.0	(34.0)
<b>State Treasurer</b>					
Interest Earnings	117.8		(3.3)	114.6	(3.3)
<b>Office of Financial Management</b>					
Other	(461.3)		(11.8)	(473.1)	(11.8)
Total General Fund-State**	<u>\$19,510.7</u>	<u>(\$12.1)</u>	<u>(\$2.4)</u>	<u>\$19,496.2</u>	<u>(\$14.5)</u>

<sup>1</sup> Adopted by the Forecast Council November 1996.

<sup>2</sup> Includes the impact of EHB 1417 (a \$26.4 million reduction to the state levy for taxes due in 1997), a \$13.3 million increase in the tobacco products tax due to an administrative change, and a \$1.0 million payment in lieu of taxes by the Federal government related to its presence at Handford.

\* Includes the General Fund-State portion of the Rental Car tax.

\*\* Detail may not add to totals because of rounding.

Table 3.11

Cash Basis

**General Fund-State Forecast**

March 1997 Forecast: 1995-97 &amp; 1997-99 Biennia

(Millions of Dollars)

<b>Forecast by Source</b>	<b>Fiscal 1995-A</b>	<b>Fiscal 1996-A</b>	<b>Fiscal 1997</b>	<b>1995-97 Biennium</b>	<b>Fiscal 1998</b>	<b>Fiscal 1999</b>	<b>1997-99 Biennium</b>
<b>State Taxes</b>							
Retail Sales**	\$4,126.7	\$4,170.0	\$4,354.7	\$8,524.7	\$4,596.3	\$4,821.7	\$9,418.1
Business and Occupation	1,573.6	1,611.8	1,666.6	3,278.5	1,742.0	1,861.8	3,603.8
Use	292.5	294.9	322.1	617.0	341.5	360.6	702.1
Public Utility	182.3	192.2	199.9	392.1	211.0	224.4	435.4
Liquor Sales/Liter	73.2	72.8	74.8	147.6	74.7	74.6	149.2
Beer and Wine Surtax	1.4	1.4	1.4	2.9	1.5	1.5	3.0
Cigarette	81.5	69.8	71.6	141.4	72.5	71.2	143.8
Tobacco Products	11.8	12.3	11.4	23.7	13.4	14.0	27.4
Property (State School Levy)	1,018.1	1,074.3	1,137.6	2,211.9	1,261.5	1,394.5	2,656.0
Public Utility District	26.1	26.8	28.8	55.6	30.6	32.3	62.9
Real Estate Excise	235.5	254.4	269.4	523.8	286.3	291.8	578.1
Timber Excise	25.6	28.0	25.9	53.9	26.9	26.8	53.7
Estate/Inheritance	42.2	62.1	67.2	129.3	58.5	62.0	120.5
Motor Vehicle Excise***	414.3	386.1	413.2	799.3	446.0	477.4	923.4
Boat Excise	8.6	8.5	8.7	17.2	9.4	10.0	19.4
Insurance Premiums	203.3	172.2	139.5	311.7	146.5	153.0	299.5
Other	85.5	114.8	114.2	229.0	105.6	105.7	211.3
Total Taxes	8,401.9	8,552.7	8,907.0	17,459.7	9,424.3	9,983.2	19,407.5
<b>State Non-Tax Sources</b>							
Licenses, Permits, Fees	61.8	60.8	65.9	126.7	65.9	66.6	132.5
Liquor Profits and Fees	27.1	27.1	28.2	55.3	27.5	28.6	56.2
Earnings on Investments	74.3	70.4	70.9	141.3	62.1	53.0	115.1
Lottery Transfers	137.3	103.3	101.0	204.3	109.0	110.0	219.0
Other Revenue and Transfers	(151.2)	(233.2)	(201.7)	(434.8)	(250.3)	(260.4)	(510.6)
Total Non-Tax	149.4	28.5	64.4	92.8	14.3	(2.1)	12.1
<b>Total General Fund-State *</b>	<b>\$8,551.3</b>	<b>\$8,581.2</b>	<b>\$8,971.4</b>	<b>\$17,552.6</b>	<b>\$9,438.5</b>	<b>\$9,981.1</b>	<b>\$19,419.6</b>

A Actual

\* Detail may not add to totals due to rounding.

\*\* Includes General Fund-State portion of the rental car tax in fiscal 1995 and 1996.

\*\*\* Includes General Fund-State share of the rental car tax, fiscal 1997 - 1999.



business and occupation tax collections were partially offset by an increase to the forecast of use tax, liquor, property, real estate and a variety of other smaller taxes. The reduction to the sales and business and occupation tax forecast was entirely due to experience to-date. Weaker than expected fourth quarter activity resulted in less sales and B&O revenue than expected in November. Although strong January activity offset part of the fourth quarter weakness, and the March personal income forecast was higher than the November forecast, only part of the fourth quarter shortfall is expected to be recouped in the four months left in the 1995-97 biennium.

The modest, \$38.8 million, forecast change for Department of Revenue sources for the 1997-99 biennium included a \$14.9 million increase to the sales tax forecast, an \$8.3 million increase to the business and occupation tax forecast, a \$5.8 million increase to the General Fund portion of liquor taxes, a \$8.1 million increase in the estate tax, and a \$5.8 million increase to the real estate excise tax. The use, public utility and fish excise taxes along with unclaimed property General Fund transfers were reduced slightly in the 1997-99 biennium.

The \$41.1 million increase to the forecast of Department of Revenue General Fund revenue due to a healthy economy was nearly entirely offset by a \$39.3 million reduction due to non economic factors. There were three non economic factors which changed the forecast for Department of Revenue sources in March. The first and largest, was incorporation of the impact of EHB 1417 into the revenue forecast. This legislation reduced of the state school levy for taxes due in 1997 by 4.7 percent. It was passed by the legislature early in the 1997 session and signed into law prior to adoption of the March forecast. This legislation effectively extends the 4.7 percent reduction to the state levy that was enacted in the 1995 legislative session and reduces the forecast by a total of \$58.7 million, \$32.3 million in the 1995-97 biennium and \$26.4 million in the 1997-99 biennium. The second non economic change was a change by the Department of Revenue in the administration of the tobacco products tax. The tobacco products tax is a 74.9 percent tax on the sale of all tobacco products other than cigarettes. Beginning April 10, the tax will be levied on wholesalers of tobacco products rather than the manufacturer. As a result of this administrative change, the tobacco products tax estimate was increase by \$14.6 million, \$1.3 million for the remainder of fiscal 1997 and \$13.3 million for the 1997-99 biennium. Note the increase to the tobacco products tax forecast reflects only the General Fund portion of this tax. The other non General Fund accounts funded by the tobacco products tax (the Health Services Fund and the Water Quality Account) will also experience increases. The third non economic factor affecting the revenue forecast in March was an agreement between the Federal government (the Department of Energy), Benton county and the state in which the state will receive "payments in lieu of taxes" (reflecting the state's share of the property tax levy). This increases the 1995-97 forecast by \$3.9 million and the 1997-99 forecast by \$1.0 million. Note, only the first of these three non economic factors, the impact of EHB 1417, is shown separately in table 3.1 The impacts of the other two non economic factors are included as part of the forecast change in this table.

### **Department of Licensing**

The General Fund-State forecast for taxes collected by the Department of Licensing was lowered by \$4.2 million in March. A \$5.8 million reduction to the forecast for the 1995-97 biennium was partially offset by a \$1.6 million increase to the forecast for the 1997-99 biennium. The majority of this change, \$3.9 million, reflects a reduction to the forecast of the General Fund portion of the motor vehicle excise tax. The remainder of the change is primarily due to weaker than expected



license and fee revenue for fiscal 1997 partially offset by a higher vessel registration forecast for 1997-99. The reduction to the motor vehicle excise tax forecast is due to a combination of collection experience for the four months since the November 1996 forecast partially offset by an increase to the average value forecast next biennium.

### **Office of Financial Management: Other Agencies**

The Office of Financial Management is responsible for forecasting General Fund-State revenue and transfers for all agencies other than the Department of Revenue, the Department of Licensing, the Liquor Control Board, the Insurance Commissioner, the State Treasurer and the Lottery Commission. The March 1997 General Fund forecast for these “other agencies” was reduced \$4.7 million from the November forecast. The forecast for the current biennium was raised \$6.1 million, however, this was more than offset by a \$10.8 million reduction to the 1997-99 forecast.

### **State Treasurer**

The interest earnings forecast was reduced \$0.7 million in March. The forecast for the current biennium was increased \$2.7 million based on collection experience since the last update in November 1996 and a slightly higher average daily investable balance assumption for the remainder of fiscal 1997. The improvement to the forecast for the current biennium is more than offset by a reduction next biennium. The interest earnings forecast for the 1997-99 biennium was reduced \$3.4 million. The reduction was due to a combination of a slightly lower average daily balance assumption than in November and a slightly lower short term interest rate forecast.

### **Liquor Control Board**

The March forecast of the General Fund-State portion of liquor excess funds(profits) and fees was raised \$6.4 million. The forecast for the current biennium was increased \$0.7 million and the forecast for the 1997-99 biennium was increased \$5.7 million. \$2.9 million of the increase next biennium reflects adjusting the forecast to reflect a change in budget assumptions from the agency request level to what was included in the governor budget proposal. The remainder of the increase reflects stronger sales growth than previously assumed. Liquor sales have been growing faster than expected in fiscal 1997. The sale of spirits are expected to grow 2.2 percent in fiscal 1997. The stronger growth is reflected in actual experience for fiscal 1997 and the higher base is the major reason for the improvement to the forecast for the 1997-99 biennium.

### **Lottery Commission**

A \$51 million reduction to the forecast of lottery transfers to the General Fund was far-and-away the largest change to the revenue forecast in March. The forecast for fiscal 1997 was reduced \$17 million, including the \$11.4 million shortfall in the four months since the November forecast. The forecast for next biennium was reduced \$34 million. \$6.8 million of this change is due to a reduction in expected revenue from enhancements to existing games that require additional FTE's. The remainder of the reduction reflects a lower sales forecast, primarily for lotto.

### **Track Record for the 1995-97 Biennium**

The March 1997 forecast of General Fund-State cash receipts for the 1995-97 biennium is \$17,552.6 million. This is \$38.1 million less than the previous forecast prepared in November 1996

including a \$32.3 million reduction due to legislation. Excluding legislation, the March forecast for the 1995-97 biennium is \$5.8 million lower than the November 1996 forecast and \$392 million, 2.2 percent, higher than the initial forecast for the 1995-97 biennium (excluding legislation) made in February 1994. There have been twelve quarterly updates to the forecast for the 1995-97 biennium. There have been six reductions (including the current change) and six increases. Table 3.12 summarizes the changes to the 1995-97 General Fund-State forecast.

## **Track Record for the 1997-99 Biennium**

The March 1997 forecast of General Fund-State cash receipts for the 1997-99 biennium is \$19,419.6 million. This is \$14.1 million, including a \$26.4 million reduction due to legislation, below the prior November 1996 forecast. Excluding legislation, the March forecast for the 1997-99 biennium is \$12.3 million higher than the November forecast and is \$357 million (1.9 percent) above the February 1996 forecast, the initial forecast for the 1997-99 biennium. Table 3.13 summarizes the changes to the General Fund-State forecast for the 1997-99 biennium.

## **The Relationship Between the Cash and GAAP General Fund-State Revenue Forecasts**

Legislation enacted in 1987 requires that the state's biennial budget be in conformance with Generally Accepted Accounting Principles (GAAP) and that the Forecast Council adopt a cash forecast as well as a forecast of revenue on a GAAP basis. There are thus two related but distinct General Fund-State forecasts summarized in this chapter: a cash receipts forecast and a GAAP revenue forecast. Revenue on a GAAP basis are credited to the biennium in which they are earned even though they may not yet have been collected. The cash forecast, on the other hand, reflects expected cash receipts during a fiscal period. The primary difference between the cash and GAAP forecasts is timing of the receipt of revenue. The forecast on a GAAP, or accrual, basis is primarily used for financial reporting. The cash forecast is used for cash flow management and is the forecast used to produce the state's budgetary balance sheet, which is the principal tool for assessing the General Fund's current surplus or deficit position. References to the General Fund-State forecast in the text of this chapter refer to the cash forecast unless otherwise noted. Likewise, the revenue tables other than Tables 3.8 and 3.10 are on a cash basis.

Table 3.14 compares the cash receipts forecast and the GAAP forecast by agency. Actual revenue for the 1993-95 biennium on a GAAP basis totals \$16,637.7 million, \$73.1 million higher than the cash total of \$16,564.6 million. The March forecast for the 1995-97 biennium on a GAAP basis is \$17,597.5 million, \$44.9 million more than the cash estimate of \$17,552.6 million. The GAAP forecast for the 1997-99 biennium totals \$19,496.2 million, \$76.7 million more than the cash receipts forecast of \$19,419.6 million.

Table 3.15 presents the budgetary balance sheet which summarizes the General Fund-State forecast of expected receipts and expenditures and when combined with the biennium's beginning undesignated fund balance, yields a projected ending balance for the 1995-97 biennium based on the March 1997 outlook. The estimated ending fund balance based on the March cash forecast, current expenditure projections, and adjustments based on the actual 1996 Fund balance is \$564.3 million. This is \$38.1 million less than the \$602.4 million ending balance expected in November.

Table 3.12

Cash Basis

**Track Record for the 1995-97 General Fund-State Cash Forecast**

February 1994 through March 1997

(Millions of Dollars)

<b>Date of Forecast</b>	<b>Department of Revenue*</b>	<b>Other Agencies*</b>	<b>Subtotal*</b>	<b>Legislation**</b>	<b>Total Change</b>	<b>Total General Fund-State Cash Basis</b>
February 1994 ****	\$16,701	\$1,130	\$17,831			\$17,831
<b>Changes to Forecast</b>						
June 1994	(8)	(1)	(9)	(192) <sup>1</sup>	(201)	17,630
September 1994	114	29	143	0	143	17,774
November 1994	195	(2)	193	1	194	17,968
March 1995	(35)	13	(23)		(23)	17,945
June 1995	(152)	9	(143)	(242) <sup>2</sup>	(385)	17,560
September 1995	101	23	124		124	17,684
November 1995	(7)	1	(6)	(10) <sup>3</sup>	(15)	17,668
February 1996	(99)	(10)	(109)	(132) <sup>4</sup>	(242)	17,427
June 1996	110	(10)	100	(60) <sup>5</sup>	41	17,467
September 1996	33	24	57		57	17,524
November 1996	54	16	70	(4) <sup>6</sup>	66	17,591
March 1997	8	(13)	(6)	(32) <sup>7</sup>	(38)	17,553
<b>Total Change***:</b>						
From February 1994	\$314	\$78	\$392	(\$671)	(\$278)	
Percent Change	1.9%	6.9%	2.2%	(3.8%)	(1.6%)	

\* Excludes legislative, judicial or other major non-economic changes.

\*\* Includes legislative, judicial or other major non-economic changes.

\*\*\* Detail may not add to total due to rounding.

\*\*\*\* First official forecast for the 1995-97 biennium.

- 1 Change to the forecast due to legislation and budget driven revenue enacted during the 1994 legislative session. Major changes include: enactment of a B&O small business credit; enactment of a high technology credit; expansion of the sales tax deferral program and reduction of the B&O surtax enacted in 1993
- 2 Change to the forecast due to legislation and budget driven revenue enacted during the 1995 legislative session. Major changes include: a sales tax exemption for machinery and equipment purchased by manufacturers, a one-time reduction in the state property tax levy and selected B&O tax rate reductions.
- 3 Change to the forecast due to legislation. This legislative change primarily reflects the General Fund-State impact of the stadium funding package (-\$7.2 million) enacted during the November 1995 special legislative session.
- 4 Change to the forecast due to 1996 legislation effective January 1996. This legislative reduces the B&O tax rate on service activities, increases the B&O job credit for distressed areas and creates a B&O credit for employer provided training in distressed areas.
- 5 Change to the forecast due to 1996 legislation. (Excluding the impact of SSB 6117 which was included in the forecast in February. Major changes include: a sales tax exemption for research and development equipment; a sales tax exemption for repair and replacement of manufacturing equipment; a reduction in the B&O tax rate for nuclear waste clean-up and a sales/use exception for certain solar/wind power generation equipment.
- 6 Reduction to the forecast due to a change in reporting of the tobacco products tax.
- 7 EHB 1417, enacted during the 1997 session, reduces the state levy for taxes due in 1997 by 4.7%  
Note, other non-economic changes are included as forecast changes; these include a \$1.3 million increase to the tobacco products tax due to an administrative change by the Department of Revenue and a \$3.9 million increase from payments in lieu of taxes (state school levy) by the federal government related to their presence at Hanford.

Table 3.13

Cash Basis

**Track Record for the 1997-99 General Fund-State Cash Forecast**

February 1996 through March 1997

(Millions of Dollars)

<b>Date of Forecast</b>	<b>Department of Revenue*</b>	<b>Other Agencies*</b>	<b>Subtotal*</b>	<b>Legislation**</b>	<b>Total Change</b>	<b>Total General Fund-State Cash Basis</b>
February 1996****	\$18,046	\$1,153	\$19,199			\$19,199
<b>Changes to Forecast</b>						
June 1996	57	17	74	(96) <sup>1</sup>	(22)	19,177
September 1996	38	31	69		69	19,246
November 1996	166	35	201	(13) <sup>2</sup>	188	19,434
March 1997	53	(41)	12	(26) <sup>3</sup>	(14)	19,420
<b>Total Change***:</b>						
From February 1996	\$314	\$42	\$357	(\$136)	\$221	
Percent Change	1.7%	3.7%	1.9%	(0.7%)	1.2%	

\* Excludes legislative, judicial or other major non-economic changes.

\*\* Includes legislative, judicial or other major non-economic changes.

\*\*\* Detail may not add to total due to rounding.

\*\*\*\*First official forecast for the 1997-99 biennium.

- 1 Change to the forecast due to 1996 legislation. (Excluding the impact of SSB 6117 which was included in the forecast in Feb. 1996. Major changes include: a sales tax exemption for research and development equipment.  
A sales tax exemption for repair and replacement of manufacturing equipment and a reduction in the B&O tax rate for nuclear waste cleanup and a sales/use exception for certain solar/wind power generation equipment.
- 2 A reduction to the forecast due to a change in the way the tobacco product tax is reported.
- 3 EHB 1417, enacted and signed into law during the 1997 session. Reduces the state levy for taxes due in 1997 by 4.7 percent.  
Note: Other non-economic changes are included as a forecast change; these include a \$13.3 million increase to the tobacco products tax due to an administrative change by the Department of Revenue and one million dollar increase due to payments in lieu of taxes (for the state portion of the school levy) by the federal government related to their presence at Hanford.

Table 3.14  
**March 1997 Baseline Forecast by Agency**  
 General Fund - State 1993-95, 1995-97 & 1997-99 Biennia  
 Comparison of Cash and GAAP Basis  
 (Millions of Dollars)

Agency	1993-95 Biennium			1995-97 Biennium			1997-99 Biennium		
	Cash Basis <sup>1</sup>	GAAP Basis <sup>2</sup>	Diff.	Cash Basis <sup>1</sup>	GAAP Basis <sup>2</sup>	Diff.	Cash Basis <sup>1</sup>	GAAP Basis <sup>2</sup>	Diff.
General Fund - State Cash/Revenue Sources									
Department of Revenue <sup>3</sup>	\$15,088.7	\$15,169.7	\$81.0	\$16,302.3	\$16,342.4	\$40.1	\$18,140.0	\$18,223.5	\$83.5
Department of Licensing	848.0	847.9	(0.2)	844.5	845.0	0.6	974.3	967.4	(7.0)
Insurance Commissioner <sup>4</sup>	351.9	351.9	0.0	317.4	317.5	0.1	305.3	305.3	0.0
State Treasurer	159.6	159.3	(0.3)	141.3	140.1	(1.2)	115.1	114.6	(0.5)
Office of Financial Management									
Tuition	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other agencies	122.9	125.1	2.3	146.7	147.2	0.5	140.5	141.1	0.6
Subtotal: General Fund-State Cash/Revenue*	16,571.1	16,654.0	82.9	17,752.3	17,792.3	40.0	19,675.2	19,751.8	76.6
General Fund State - Other Financing Sources <sup>5</sup>									
Department of Revenue <sup>6</sup>	84.3	90.3	6.1	84.3	88.1	3.8	86.4	86.4	0.0
Lottery Commission	248.1	232.0	(16.1)	204.3	205.4	1.1	219.0	219.0	0.0
Insurance Commissioner <sup>7</sup>	(4.7)	(4.7)	0.0	(5.7)	(5.7)	0.0	(5.9)	(5.9)	0.0
Liquor Control Board	58.0	58.2	0.3	58.2	58.2	0.0	59.1	59.1	(0.0)
Office of Financial Mangement									
Other Agencies <sup>8</sup>	(392.2)	(392.1)	0.0	(540.8)	(540.7)	0.0	(614.2)	(614.2)	0.0
Subtotal: GFS Other Financing Sources*	(6.5)	(16.3)	(9.8)	(199.7)	(194.8)	4.9	(255.6)	(255.6)	-0.0
Total Available Receipts/Resources									
General Fund-State *	\$16,564.6	\$16,637.7	\$73.1	\$17,552.6	\$17,597.5	\$44.9	\$19,419.6	\$19,496.2	\$76.6

\*Detail may not add due to rounding.

<sup>1</sup> General Fund-State cash receipts forecast.

<sup>2</sup> General Fund-State Revenue Forecast on a GAAP (Generally accepted accounting principles) basis, used to show the state revenue position for financial reporting purposes.

<sup>3</sup> Excludes the state share of the timber tax and unclaimed property transfers.

<sup>4</sup> Total insurance premiums tax.

<sup>5</sup> Other financing sources represent transfers to/from other funds from/to the General Fund.

<sup>6</sup> Includes the state share of the timber excise tax and unclaimed property transfers.

<sup>7</sup> Forty percent of fire insurance premiums.

<sup>8</sup> Agency 701 and accounting sources: 480 and 481 for all other agencies.

Table 3.15  
**1995-97 Balance Sheet**  
 General Funds-State  
 Millions of Dollars

<b>RESOURCES</b>	
Beginning Balance	\$558.9
November Revenue Forecast	17,590.7
Legislative Change*	(32.3)
March Forecast Change	(5.8)
Changes in Reserves/Other Adjustments	34.6
<b>Total Resources</b>	<b>18,146.1</b>
<b>EXPENDITURES</b>	
1995-97 Appropriations	17,581.8
<b>Total Appropriations</b>	<b>17,581.8</b>
<b>BALANCE</b>	
Ending Balance	\$564.3
I-601 Emergency Reserve Account	0.0

\*EHB 1417 - Passed in the 1997 session, reduced the state property tax by 4.7 % for 1997 taxes.

Source: House and Senate Fiscal Committees  
 Office of Financial Management

Table 3.16

**Higher Education Operating Fee Forecast**

March 1997 Compared to the November 1996 Forecast

Cash and GAAP Forecast

(Millions of Dollars)

	November 1996 Forecast	Legislative Change	Forecast Change	March 1997 Forecast	Total Change
1991-93 Biennium	\$214.2	\$0.0	\$0.0	\$214.2	0.0
Fiscal 1994	263.5	0.0	0.0	263.5	0.0
Fiscal 1995	313.2	0.0	0.0	313.2	0.0
1993-95 Biennium	\$576.6	\$0.0	\$0.0	\$576.6	\$0.0
Fiscal 1996	319.2	0.0	0.0	319.2	\$0.0
Fiscal 1997	335.3	0.0	0.3	335.6	\$0.3
1995-97 Biennium	654.4	\$0.0	\$0.3	654.7	\$0.3
Fiscal 1998	335.1	17.5	0.0	352.6	\$17.5
Fiscal 1999	346.6	29.1	0.0	375.7	\$29.1
1997-99 Biennium	\$681.7	46.6	0.0	\$728.3	\$46.6
Forecast by Institution (Thousands of Dollars)					
		Fiscal 1996	Fiscal 1997	Fiscal 1998	Fiscal 1999
University of Washington		\$101,342	\$107,559	107,707	114,411
Washington State University		52,754	56,280	58,301	63,362
Eastern Washington University		16,669	15,669	17,690	19,283
Central Washington Universtiy		15,517	16,300	15,559	16,572
Western Washington University		20,324	21,500	22,068	23,570
The Evergreen State College		10,845	11,215	11,486	12,460
Community Colleges		101,720	107,027	119,780	126,029
Total Tuition and Fees		\$319,171	\$335,550	\$352,591	\$375,687

\*Beginning July 1, 1992, tuition and fees collected by institutions of higher education are deposited into the operating account of each institution and are not part of the General Fund. This table shows only the tuition forecast since this change. Prior to July 1992 the tuition and fee forecast is included in the General Fund-State total shown elsewhere in this chapter.



## **Tuition Forecast**

Legislation enacted during the 1992 legislative session removed higher education tuition and operating fees collected by the state's colleges and universities from the General Fund. Instead, tuition and fee revenue are deposited into the operating fund of each institution of higher education. This change became effective July 1992. The legislation enacting this transfer requires a review of the tuition forecast by the Forecast Council staff and Work Group and approval by the Forecast Council as part of the quarterly forecast review process. Table 3.16 shows tuition revenue for fiscal 1993 and beyond, including the March 1997 forecast for fiscal years 1997 through 1999. The tuition numbers for fiscal 1992 and earlier years are included in the General Fund-State totals shown in other tables in this chapter. Data through fiscal 1996 reflect actual collections. The March 1997 tuition and fee forecast for the 1995-97 biennium was increased \$0.3 million. This change was based on revisions to enrollment assumptions for the current school year at the various universities and colleges. The forecast for the 1997-99 biennium totals \$728.3 million. This is \$46.6 million higher than the forecast in November. The March forecast for the 1997-99 biennium is based on Governor Locke's proposed tuition fee increases of 4 percent in fiscal 1998 and 4.3 percent in fiscal 1999 and enrollment increases of 1,987 FTE students in fiscal 1998 and 4,323 FTE students in fiscal 1999. The November forecast was based on current tuition rates adjusted for inflation and the Higher Education Coordinating Board's enrollment plan.

## **Alternative Forecasts**

There are two primary risks to the March baseline forecast. One is that the national economy slips into a recession in 1997, the second is that the current economic expansion accelerates in 1997 and 1998 followed in 1999 or 2000 by a recession. These two scenarios are considered in the March alternative forecasts. The March optimistic alternative is based on DRI's "Boom/Bust" alternative in which economic growth accelerates only to slip into a recession in 1999. However, only the "boom" portion of this scenario significantly affects the economy and General Fund revenue in the remainder of the 1995-97 biennium and the 1997-99 biennium, since the most of the "bust" portion of this alternative is in late 1999, beyond the forecast horizon. In this scenario, both consumer and business confidence improve from their current high levels, resulting in an acceleration of growth in consumption and investment spending. Employment and income growth is stronger than assumed in the baseline. With a stronger national economy, Washington's economic growth is also higher than in the baseline forecast. By the end of fiscal 1997 state personal income is 1.6 percent above the baseline estimate and wage and salary employment is 8,000 higher. By the end of the 1997-99 biennium state employment is 0.9 percent above the baseline forecast and income is 4.6 percent above the baseline.

The pessimistic alternative assumes a recession in 1997. In this scenario, aggressive action to control inflation by the Federal Reserve and weakening consumer confidence trigger a recession beginning in the third quarter of 1997. Real GDP declines for three quarters. Washington's economy slows in response to the weakening national economy. Aerospace growth is weaker than the baseline forecast in this scenario, but still shows positive growth through fiscal 1998. However, Washington's overall income and employment decline is greater than the U.S. as a whole. In the pessimistic alternative, state personal income is 1.4 percent below the baseline by the end of fiscal 1997 and



5.2 percent less than the baseline by the end of the 1997-99 biennium. Employment is 7,300 less than the baseline by the end of the current biennium and is 78,400 jobs below the baseline by the end of fiscal 1999.

Tables 3.17 and 3.18 show the revenue implications of these alternative scenarios for the 1995-97 and 1997-99 biennia. The optimistic scenario generates \$17,714.1 million in General Fund-State revenue in 1995-97. This is \$161.5 million more than the baseline forecast. The pessimistic alternative produces only \$17,404.8 million in the 1995-97 biennium, \$147.8 million less than the baseline forecast. For next biennium, the optimistic alternative forecast generates \$20,345.0 million, \$925.4 million more than the 1996 baseline estimate. The pessimistic scenario produces only \$18,332.0 million, \$1,087.6 million less than the baseline forecast. In addition to the official optimistic and pessimistic alternatives, another alternative forecast was prepared in March. This was developed by averaging the forecasts of several key economic variables made by members of the Governor's Council of Economic Advisors. The Governor's Economic Council's alternative was similar to the baseline, producing \$10 million more for the General Fund for the 1995-97 biennium and \$97 million more than the baseline in the 1997-99 biennium.

Table 3.17

Cash Basis

**March 1997 Alternative Forecasts Compared  
to the March 1997 Baseline Forecast**1995-97 Biennium  
(Millions of Dollars)

<b>Forecast by Source</b>	<b>Optimistic Forecast</b>	<b>Baseline Forecast</b>	<b>Pessimistic Forecast</b>
<b>Department of Revenue</b>			
Retail Sales	\$8,553.0	\$8,524.7	\$8,500.7
Business and Occupation Use	3,288.1	3,278.5	3,271.1
Public Utility	618.7	617.0	615.7
Property (School Levy)	392.6	392.1	391.6
Real Estate Excise	2,268.8	2,211.9	2,155.0
Other	525.9	523.8	521.1
Subtotal	852.9	838.6	828.3
	16,500.0	16,386.6	16,283.5
<b>Department of Licensing</b>	857.5	844.5	831.4
<b>Insurance Commissioner</b> <sup>1</sup>	315.2	311.7	308.2
<b>Lottery Commission</b>	219.3	204.3	189.3
<b>State Treasurer - Interest Earnings</b>	148.2	141.3	137.1
<b>Liquor Profits and Fees</b> <sup>2</sup>	58.9	58.2	58.2
<b>Office of Financial Management</b>			
Other Agencies	(385.1)	(394.0)	(402.9)
<b>Total General Fund - State*</b>	<b>\$17,714.1</b>	<b>\$17,552.6</b>	<b>\$17,404.8</b>
Difference from the March 1997 Baseline	\$161.5		(\$147.8)

1 Insurance premiums, General Fund-State portion.

2 Includes beer and wine surtax.

\* Detail may not add to total due to rounding.

Table 3.18

Cash Basis

**March 1997 Alternative Forecasts Compared  
to the March 1997 Baseline Forecast**1997-99 Biennium  
(Millions of Dollars)

<b>Forecast by Source</b>	<b>Optimistic Forecast</b>	<b>Baseline Forecast</b>	<b>Pessimistic Forecast</b>
<b>Department of Revenue</b>			
Retail Sales	\$9,795.7	\$9,418.1	\$8,880.6
Business and Occupation Use	3,745.9	3,603.8	3,456.3
Public Utility	730.9	702.1	669.5
Property (School Levy)	448.4	435.4	425.3
Real Estate Excise	2,788.8	2,656.0	2,549.8
Other	626.5	578.1	500.2
Subtotal	867.2	832.9	799.0
	19,003.4	18,226.4	17,280.7
<b>Department of Licensing</b>	1,003.6	974.3	945.1
<b>Insurance Commissioner</b> <sup>1</sup>	306.9	299.5	292.0
<b>Lottery Commission</b>	251.0	219.0	186.0
<b>State Treasurer - Interest Earnings</b>	155.4	115.1	80.8
<b>Liquor Profits and Fees</b> <sup>2</sup>	60.6	59.1	59.1
<b>Office of Financial Management</b>			
Other Agencies	(435.9)	(473.8)	(511.7)
<b>Total General Fund - State*</b>	<b>\$20,345.0</b>	<b>\$19,419.6</b>	<b>\$18,332.0</b>
Difference from the March 1997 Baseline	\$925.4		(\$1,087.6)

---

1 Insurance premiums, General Fund-State portion.

2 Includes beer and wine surtax.

\* Detail may not add to total due to rounding.

---

# Why Is Washington's Unemployment Rate So High?

## Introduction

Washington is in the midst of another strong economic expansion. The housing market is heating up, in-migration accelerating, the Seattle Times Help-Wanted Index at an all-time high, Boeing and Microsoft are creating thousands of high-paying jobs, Northwest stocks are booming, and a general sense of confidence permeates the business pages of leading state newspapers. All this comes at a time the U.S. is having its strongest economy in 30 years.

The lone asterisk on Washington's otherwise impressive report card is an above average unemployment rate. In 1996, a good one for the state's economy, Washington's unemployment rate ranked 6th worst among the states. It is unlikely to improve much in the rankings, at least not for long. Washington's unemployment rate has exceeded the U.S.'s 48 out of the past 50 years.

Washington's high unemployment rate is puzzling. Washington has not had an employment downturn in 14 years (As this publication's cover displays). Over the past 25 years it ranks 6th among states in job creation, scoring high in creating all types of jobs in all sectors of the economy. Nonetheless, it perennially ranks high in the unemployment rankings. Only five states, including Louisiana, Mississippi, Alabama, and West Virginia—states not normally grouped with Washington—have maintained higher unemployment rates over the past 18 years<sup>1</sup>.

This special report examines the reasons for Washington's high unemployment rate. It arrives at three conclusions. First, it helps to simplify the issues by focusing on the 45 percent of the unemployed covered by unemployment insurance since the unemployment rate for the other 55 percent—those not covered—is below the U.S.'s. Second, Washington's uninsured unemployment rate is high because its unemployment insurance (UI) benefits are among the highest of the states. Third, policy makers could lower the state's unemployment rate by making benefits more in line with those in other states, but at some cost in the distribution of income. The tradeoff between

1 The Bureau of Labor Statistics unemployment database for the states only goes back to 1978.

having flexible labor markets and hurting those at the lower end of the earnings distribution makes setting the proper level of benefits a difficult choice.

The reports proceeds as follows. Part 1 discusses the anomaly motivating this research: how can a state that creates so many good jobs rate so poorly in the unemployment rankings? Part 2 shows why one need only focus on the unemployed covered by unemployment insurance to answer this question. Part 3 provides background on Washington's unemployment insurance system. Part 4 reviews research on this topic. Part 5 compares Washington's benefits with those in other states. Part 6 discusses alternative explanations for Washington's high unemployment ranking. Part 7 accounts for the high employment growth-high unemployment anomaly. Part 8 discusses the tradeoff between having flexible labor markets and hurting those at the lower end of the distribution of earnings. Part 9 concludes.

## Part 1. The Anomaly

Two conflicting sets of facts motivate this report. First, Washington is a high unemployment state. Over the past 19 years, its seasonally adjusted unemployment rate exceeded the U.S. 's in 199 out of 228 months. Only 5 states had higher-than-national rates for longer periods: West Virginia (223 months), Louisiana (219 months), Alaska (222 months), Alabama (205 months), and Mississippi (205 months). Six states, Kansas, Minnesota, Nebraska, North Dakota, South Dakota, and Virginia had rates below the U.S.'s all 228 months.

Washington's unemployment rate has exceeded the U.S. 's 48 of the past 50 years (Chart 4.3). In 1990 and 1991, a recessionary period Washington avoided, state unemployment fell .6 and .3 percent below the U.S. 's. These years, though, are the two exceptions. Although the gap between the state and national rates **may have** narrowed in recent years, Washington's unemployment ranking remains among the nation's worst. In 1996, for example, a strong year for the state's economy, Washington's unemployment rate was 6th worst among the states, exceeding the U.S. 's by 1.1 percent.

Second, Washington also rates high in creating jobs. Over the past 25 years, Washington added 1.6 million jobs, growing 3 percent a year and ranking 7th in job creation behind Nevada, Arizona, Alaska, Florida, Utah, and Colorado (all, except for Alaska, low unemployment states). To give these figures perspective, consider that during the same period U.S. employment grew 2.0 percent a year (creating 57 million jobs). Among the 10 developed countries tracked by the Bureau of Labor Statistics, none outgrew Washington. Only Canada (2.16 percent) outgrew the U.S. . Australia (1.71 percent) grew nearly as fast as the U.S. . The seven other economies, Germany (.24 percent), Sweden (.21 percent), Italy (.18 percent), France (.33 percent), Japan (.91 percent), and The United Kingdom (.22 percent) grew at a fraction of the U.S. and state rates. In fact, during the past 25 years Washington created more jobs than Italy (.89 million), the United Kingdom (1.38 million) and Sweden (.2 million), as many as Germany (1.6 million), and nearly as many as France (1.7 million). Compared to other states, Washington's capacity for creating jobs is remarkable. Compared to other countries, it is astonishing<sup>2</sup>.

2 Washington's high job growth rate is remarkable for a more important reason. Most fast growing states are also low-wage states. Among the 10 fast growing states the past 25 years, only Nevada's and Alaska's average wage is higher. With aerospace and software expanding in 1996, the trend towards creating high-wage jobs continues.

The rest of this report tries to reconcile these conflicting sets of facts. The following section shows why focusing on the insured unemployed is central to this task.

## Part 2. Two Different Unemployment Rates

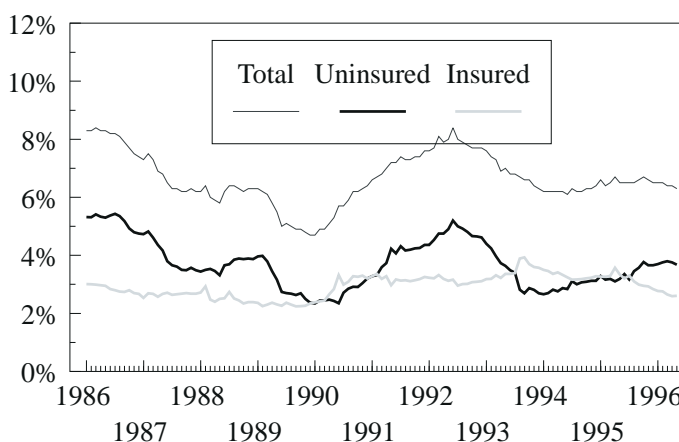
Chart 4.1 tracks the seasonally adjusted monthly unemployment rate for 1986-1996, dividing it into two categories: the bold gray line tracks those covered by unemployment insurance, a group consisting mainly of workers losing their jobs in recent months. The bold black line represents those not covered, a group consisting mainly of new entrants and re-entrants into the labor force, and the long-term unemployed. The thin black line is the sum of the two series.

Note that the uncovered rate varies more, indicating that this group—the new entrants and re-entrants into the labor force, and the long-term unemployed (including those whose UI benefits have expired)—responds more quickly to cyclical variations in labor demand and supply. Note also that the uncovered group moves synchronously with the total series (which in turn moves in synch with the U.S. series—see Chart 2.2 in Chapter 2), indicating that cyclical variations in the state’s unemployment rate mainly reflect variations in the uncovered rate. In contrast, the unemployment rate for the covered group is trendless. It responded feebly, for example, to the 1986-1990 boom, and rose discreetly by a small amount in mid 1990 when the U.S. fell into a recession and aerospace began its decline, before leveling off again.

To understand why the insured series is the key to understanding the state’s high unemployment ranking, consider the comparisons between the state and national unemployment rates in Charts 4.2 through 4.5. Chart 4.2 tracks the yearly unemployment rate for 1947-1996. Note that Washington’s rate exceeded the U.S.’s throughout this period except for 1990 and 1991. Chart 4.3 tracks the insured unemployment rate (total unemployed divided by covered employment). Here, Washington’s rate exceeded the U.S.’s all 50 years. Chart 4.4 tracks a slightly different concept—the unemployment rate for those covered by unemployment insurance (covered unemployment divided by the labor force). Again, Washington is higher than the U.S. all 50 years. Finally, Chart 4.5 tracks the unemployment rate for uncovered workers (uncovered unemployed divided by the labor force). Notice their unemployment rate has fallen below the U.S.’s the past 7 years. Washington’s high

**Chart 4.1**

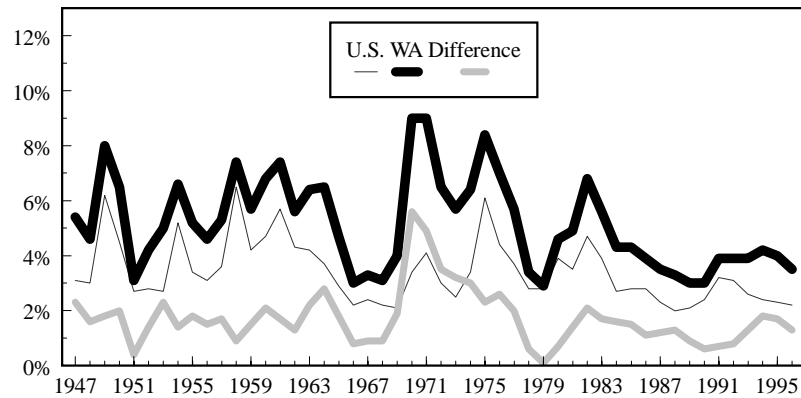
Insured and Unemployed Uninsured Rates  
Percent



# Insured and Uninsured Unemployment Rates

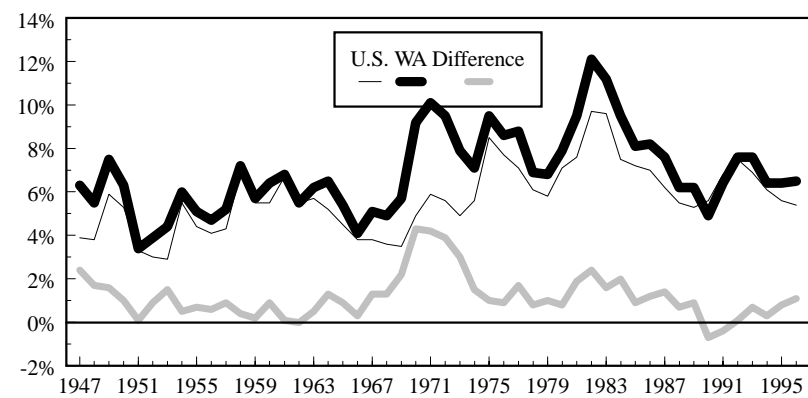
**Chart 4.2**

Insured Unemployment Rates



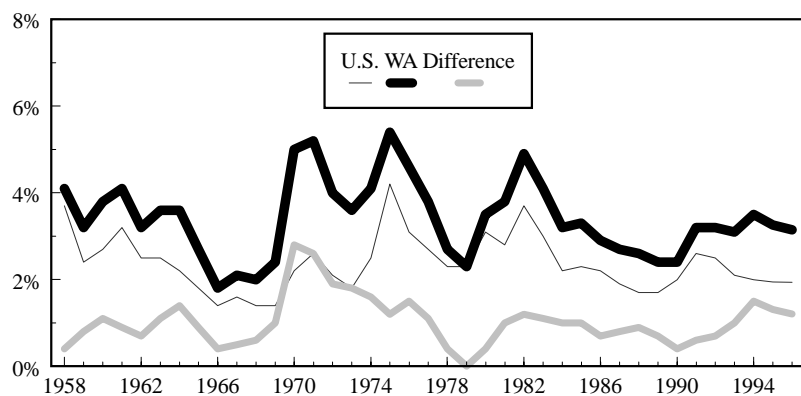
**Chart 4.3**

Unemployment Rates



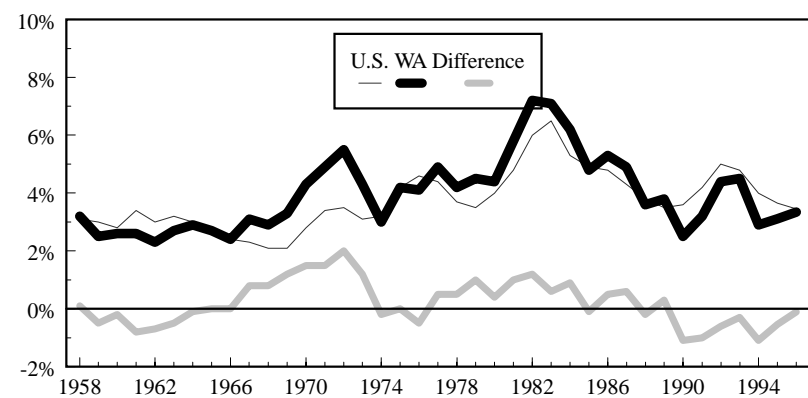
**Chart 4.4**

Unemployment Rates for Covered Workers



**Chart 4.5**

Unemployment Rates for Uncovered Workers



unemployment rate in recent years, thus, can be attributed solely to the 45 percent of the unemployed population covered by unemployment insurance.<sup>3</sup>

Before dismissing the uncovered group, it is worth discussing why this group also had an above national rate during the 1970's and 1980's. As prosperous as Washington has been, it contains several counties prosperity bypassed these two decades. These counties experienced high unemployment rates, low employment-to-population ratios, and declining real earnings throughout most of this period, but somewhat better times since. Many of these counties continue to experience economic hardships, but their labor force has made many of the required adjustments (such as taking lower paying jobs, moving into areas of the state providing better jobs, etc.) required to lower the uncovered unemployment rate.

The focus of the remainder of this report, thus, will be on the 45 percent of the unemployed population covered by unemployment insurance.

### **Part 3. Background on Washington's Unemployment Insurance System**

The Social Security Act of 1935 created the Federal-State unemployment compensation system. Its purpose was to provide financial help to unemployed workers and stabilize local communities during economic downturns. Although federal guidelines impose minimum standard across states, tax rates, weekly benefits, the duration of benefits, and eligibility requirements vary greatly across states.<sup>4</sup>

Payroll taxes finance the system. Washington's 1996 tax rates ranged from 0.36 percent to 5.42 percent of the first \$20,300 of earnings, depending on an employer's unemployment experience. The Unemployment Insurance (UI) system covers 85 percent of all workers in Washington. Corporate officers, salesmen working on a commission basis and railroad employees are among the 15 percent not covered.

The weekly benefit amount varies depending on prior earnings. Currently it ranges from a minimum of \$78 (15 percent of the average weekly covered wage—the highest minimum in the country) to a maximum of \$365 (70 percent of the average covered wage—the second highest in the country). In 1995 the average weekly benefit was \$204, with twenty-two percent of claimants qualifying for the maximum amount. Benefits are taxable as ordinary income (prior to 1986, most benefits were tax exempt). Workers on strike cannot receive benefits. Workers quitting their jobs and those dismissed with cause under certain circumstances may receive reduced benefits. While collecting benefits, workers must look for a job.

The duration of benefits in Washington State varies, ranging from 10 to 30 weeks. Thirty weeks is the longest maximum duration in the United States. During periods of high unemployment benefits can be extended to 39 weeks. During periods of extremely high unemployment benefits may last up to 46 weeks. Persons in approved training programs can receive benefits for up to 2 years.

<sup>3</sup> The proportion varies between one and two thirds, depending on the stage of the business cycle.

<sup>4</sup> The average weekly benefits in 1993 ranged from \$119 in Louisiana to \$251 in Hawaii. The maximum allowable duration ranged from 17 weeks in Maine to 27.5 weeks in Massachusetts.



In 1995 the average potential entitlement was 26 weeks and the average duration was 18 weeks. Thirty-three percent of all claimants exhausted their benefits.

This report provides three types of evidence documenting how unemployment insurance accounts for Washington's poor unemployment ranking. First, a literature review. Second, correlations. Third, a lack of plausible alternatives. It deliberately steered away from a fourth type of evidence, econometric estimates. Such estimates, though they may provide the strongest evidence, would have required detailed information on each state's UI system (in order to estimate the impact of benefits and duration, one must control for all other influences). A proper study of this intricate subject, by necessity, must be massive, complex and high-brow—in brief, well-funded. The findings in this report, thus, must be considered tentative.

## **Part 4. Benefits in Washington are Among the Best**

According to Table 4.1, Washington protects workers against unemployment spells better than just about any other state. This table, taken directly from The U.S. Department of Social Welfare's 1994 Green Book, lists the maximum amount four hypothetical worker were entitled to receive in state unemployment benefits in January 1994. The workers were:

- ◆ A \$4.25/hr. wage; 40 hrs/wk; 52 wks/yr.; nonworking spouse; no children
- ◆ B \$6.00/hr. wage; 40 hrs/wk; 52 wks/yr.; nonworking spouse; no children
- ◆ C \$9.00/hr. wage; 40 hrs/wk; 52 wks/yr.; nonworking spouse; two children
- ◆ D \$4.25/hr. wage; 20 hrs/wk; 52 wks/yr.; nonworking spouse; no children

In cases A, B, and C Washington offered the highest benefits, and in case D, second best.

A key variable implicit in the table is the replacement ratio—the percentage of a person's earnings unemployment insurance replaces. In most states it is 50 percent. In Washington it ranges from 50 to 70 percent, depending on previous earnings. A high replacement ratio interacts with other influences to discourage a person from quickly getting a new job. An unemployed worker does not have job related expenses—such as clothing expenses, transportation, child care, and “take-out” meals. He often qualifies for other programs, such as food-stamps, and the Earned Income Tax Credit. His marginal tax bracket is lower. In most instances an unemployed worker's new job will be at a lower salary (a worker's cost-benefit calculations are based on his expected earnings at a new job). It is easy to see that for some workers the replacement ratio might exceed 100 percent. Even at 70 percent the disincentives are strong: a worker expecting to earn \$10 an hour, (in the 20 percent tax bracket, \$8.00 an hour), would earn \$5.60 an hour (80 percent of \$7.00) collecting UI benefits—for a marginal wage gain of \$2.40 an hour.

Table 4.2 lists pertinent data on Washington's UI system, and the state's rankings. Columns 1 and 2 show that taxes accounted for about 1.2 percent of total covered wages in 1995, 7th highest in the U.S., and .45 percent above the U.S. average of .75 percent. Moreover, in 10 of the 18 years Washington's tax rate ranked among the top 5. The declining tax rate, and Washington's improvement in the rankings in recent years is partially attributable to a rising stock market, which has improved the UI fund balance, permitting lower rates. Columns 3 and 4 show Washington's average duration of insured unemployment and rankings. The typical state worker in 1995 was unemployed 18.5 weeks, 2nd highest among the states. Total unemployment benefits per capita were \$168 in

Table 4.1  
**Weekly State Benefit Amount For Various Full-Year Workers in January 1994**

	Hypothetical Worker			
	A	B	C	D
Alabama	165	165	165	92
Alaska	106	134	232	70
Arizona	88	125	185	44
Arkansas	85	120	180	45
California	82	105	142	46
Colorado	101	144	216	50
Connecticut	95	130	210	52
Delaware	96	135	203	48
District of Columbia	90	125	195	0
Florida	85	120	180	42
Georgia	88	124	185	44
Hawaii	106	149	223	53
Idaho	85	120	180	0
Illinois	101	141	237	59
Indiana	98	134	192	54
Iowa	100	141	234	50
Kansas	93	132	198	59
Kentucky	105	148	222	52
Louisiana	77	109	164	38
Maine	110	151	228	60
Maryland	93	130	211	47
Massachusetts	85	120	230	43
Michigan	NA	NA	NA	NA
Minnesota	85	120	180	42
Mississippi	85	120	165	42
Missouri	99	140	175	49
Montana	88	124	187	44
Nebraska	92	128	154	48
Nevada	88	124	187	44
New Hampshire	98	123	164	0
New Jersey	109	154	248	0
New Mexico	85	120	180	42
New York	85	120	180	43
North Carolina	85	120	180	42
North Dakota	85	120	180	0
Ohio	85	120	180	0
Oklahoma	88	124	187	44
Oregon	110	156	234	60
Pennsylvania	95	132	197	52
Puerto Rico	85	120	133	43
Rhode Island	102	144	236	51
South Carolina	85	120	180	42
South Dakota	85	120	168	42
Tennessee	169	185	185	84
Texas	89	125	188	45
Utah	86	120	180	43
Vermont	98	138	208	0
Virgin Islands	85	120	180	42
Virginia	88	124	187	0
<b>Washington</b>	<b>176</b>	<b>249</b>	<b>340</b>	<b>88</b>
West Virginia	93	131	198	46
Wisconsin	88	124	187	0
Wyoming	88	124	187	44
<b>Washington's Rank</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>

Source: 1994 Green Book , U.S. Department of Social Welfare.

Table 4.2  
Average Tax Rates, Duration, Benefits Per Capita, and Unemployment Rates for Washington

	Taxes as a Percent Total Wages		Average Duration		UI Benefits Per Capita		Unemployment Rate		Unemployment Rate for Insured		Unemployment Rate for Uninsured	
	Rate (1)	Rank (2)	Weeks (3)	Rank (4)	Rank (5)	Rate (6)	Rank (7)	Rate (8)	Rank (9)	Rate (10)	Rate (11)	Rank (12)
1978	1.94	5	13.8	10	\$53	12	6.9	8	2.70%	10	4.20%	11
1979	1.91	4	12.4	19	48	18	6.8	9	2.30	20	4.50	7
1980	1.67	5	14.6	14	89	15	7.9	10	3.50	14	4.30	15
1981	1.64	6	15.8	6	115	5	9.5	7	3.80	7	5.70	9
1982	1.65	7	18.2	4	178	4	12.1	5	4.90	5	7.20	7
1983	1.70	14	18.8	6	179	7	11.2	11	4.10	4	7.10	14
1984	1.89	14	16.2	8	120	2	9.5	7	3.20	3	6.20	13
1985	2.03	6	16.1	7	111	2	8.1	13	3.30	6	4.80	24
1986	2.15	2	15.9	7	101	4	8.2	15	2.90	8	5.30	20
1987	2.30	2	15.1	12	93	3	7.6	14	2.70	5	4.90	19
1988	2.24	2	14.8	10	88	3	6.2	17	2.60	3	3.60	25
1989	1.64	3	15.3	5	83	7	6.2	11	2.40	4	3.80	19
1990	1.39	4	14.5	12	93	12	4.9	36	2.40	9	2.50	44
1991	1.36	4	16.1	10	135	12	6.4	27	3.20	12	3.20	38
1992	1.32	5	18.4	6	183	11	7.6	13	3.20	9	4.40	27
1993	1.36	8	18.3	4	219	5	7.6	8	3.10	4	4.50	24
1994	1.20	7	18.8	2	201	2	6.4	11	3.50	3	2.90	40
1995	1.20	7	18.5	2	168	2	6.4	6	NA	NA	NA	NA
1996	NA	NA	NA	NA	NA	NA	6.5	6	NA	NA	NA	NA

1995, also second highest in the U.S. (columns 5 and 6). Columns 7 and 8 list the state unemployment rate and ranking. Columns 9 and 10 show the unemployment rate and rankings for the insured. Washington's unemployment rate for this group ranked 3rd highest in 1994, and ranked in the top five 8 out of 17 years. Note, however, that Washington's uninsured rate (column 11) ranked 40th in 1995, with the state in recent years becoming a low unemployment state.

A major reason duration is so long in Washington is that workers are eligible to collect UI benefits longer than in any other state (up to 30 weeks). Average duration in Washington, at 18.5 weeks in 1995—25 percent above the U.S.'s 14.7 weeks—was second highest among the states. Washington's longer unemployment spells accounts for a third of the gap between Washington's and the U.S. insured unemployment rate<sup>5</sup>. The remaining two thirds is attributable to more workers becoming unemployed.

## **Part 5. What the Research Says**

This topic has been extensively researched. Most of the literature agrees that a UI system can have significant disincentive effects. Layard, Nickel, and Jackman (1994) is perhaps the key work. They found that differences in UI policies, job creation subsidies, and wage determination mechanisms explain 91 percent of the variation in unemployment for 19 OECD countries. Recent studies on Europe's chronic unemployment the past two decades are coalescing to the same view Krugman (1994), Feldstein (1994), Martin (1994).

Hammermesh (1993) provides evidence that unemployment insurance increases duration, incidence, and labor force participation rates. He further argues that labor force participation is relatively inelastic, and, thus, payroll taxes used to finance social security and some portion of unemployment benefits are shifted onto wages with small impacts on employment.

Meyer (1990) looked at how varying the level and duration of UI benefits affected duration. Using data from 8 states, including Washington, He found that increasing benefits 10 percent reduces the probability that a person will leave the system by 8 percent. He also found that higher UI benefits are found to have a strong negative effect on the probability of leaving unemployment. However, the probability of leaving unemployment rises dramatically just prior to when benefits elapse. When the length of benefits is extended, the probability of spell ending is high in the weeks benefits weeks previously expected to elapse."

These studies merely confirm what standard economic models predict. Using indifference curves, one can show that a UI system results in a kinked budget line. In such a setting, an increase in benefits or duration unambiguously reduces work effort.

## **Part 6. A Lack of Plausible Alternatives**

State unemployment rates vary for many reasons: demographic differences, differences in the industrial structure, differences in the generosity of the social safety net. The following explanations are among the plausible ones the author has come across in discussions with state economists.

5 The U.S. uninsured unemployment rate was 2.2 percent. It would have been .55 percent higher if workers were unemployed 20 percent longer. (.55 percent is one third of 1.7 percent, the difference between Washington and the U.S. unemployment rate).

### **(A) The Fast Growth Theory**

Washington is a fast growing state. According to the fast growth theory, the state's labor markets cannot quickly absorb all workers coming in, many arriving without jobs. This results in periodic bulges in unemployment.

There are three problems with this theory. First, fast growing states tend to have below average unemployment rates. Among the 10 fastest growing states in 1996, for example, Washington alone ranked among the 10 worst in unemployment rates. Second, unemployment rates tend to be highest in Washington's slow growing counties. In 1995, for example, the growth rate of the 10 highest unemployment counties was 2.3 percent, compared with 3.5 percent for the balance of the state. Finally, the insured unemployed consist mainly of in-state workers who have lost their jobs in recent months. It is hard to understand how a fast growing economy (which, generally, is also an economy with expanding opportunities) should have trouble employing this group alone.

### **(B) Demographic Differences**

Unemployment rates vary among population subgroups. Women have slightly higher unemployment rates than men, non-whites almost double that of whites, and teenagers about triple that of workers 20-64. Might demographics's differences between Washington and the U.S. be biasing the insured unemployment rate upward?

Probably not. In fact the bias, if there is one, is in the other direction. Non-whites, for example, accounted for 6 percent of Washington's labor force in 1990, compared with 12 percent in the U.S. Furthermore, their unemployment rates are lower in Washington than in the U.S. Teenagers also have lower unemployment rates in Washington, and account for a smaller proportion of the labor force. Finally, while Washington's labor force contains proportionately more women than the U.S.'s, women in Washington tend to have lower unemployment rates than both women in the U.S. and men in Washington. Given demographic differences between Washington and the U.S., Washington should be among the low unemployment states. That it is not must be attributable to some other factor.

### **(C) Minimum Wages**

Washington's minimum wage tends to be above that of the U.S. In 1996 it was \$4.90 an hour, compared with the U.S.'s \$4.25 an hour. With the U.S. minimum scheduled to rise to \$5.15 an hour, the legislature is considering raising the minimum wage to maintain a respectable differential.

In theory minimum wage laws ought to decrease employment. Many economists attribute the low labor force participation and high unemployment rates among teenagers (the unemployment rate for black teenagers is currently 35 percent), for example to the unintended effects of federal minimum wage legislation. Might Washington's minimum wage laws be contributing to Washington's unemployment rate differential?

There are several reasons for discounting the effects of minimum wages. First, the market clearing wage in most state labor markets is above the state minimum wage (Washington is a high average wage state). Second, state laws, generous they may appear, exempt several key groups, including workers paid on a "piece rate basis," salesmen, newspaper vendors, many seasonal agricultural workers, and many workers employed in not-for-profit organizations. Third, unemployment rates for teenagers, the group most impacted by minimum wage laws, tend to be two to four

percentage points below the national average, indicating they are less impacted by minimum wage legislation than teenagers in the U.S. Finally, voluminous research (this, arguably, is the most over-studied topic in labor economics) has not established whether minimum wage laws reduce employment or raise unemployment rates.<sup>6</sup>

### (D) Unionization

Washington is one of the more unionized states in the country. Economic theory predicts that unions reduce employment in unionized sectors by raising wages above market clearing levels. Might unionization be contributing Washington's unemployment?

Probably not. First, it isn't clear that unions raise or reduce aggregate employment. Second, there is no reason to expect unions to raise unemployment rates (a worker denied employment in the unionized aerospace sector is unlikely to remain unemployed for long. Likely he will take a lower paying job in a non-unionized sector.) Simply, there is no reason to suspect unions of playing a role in raising the state's unemployment rate.

### (E) Seasonality

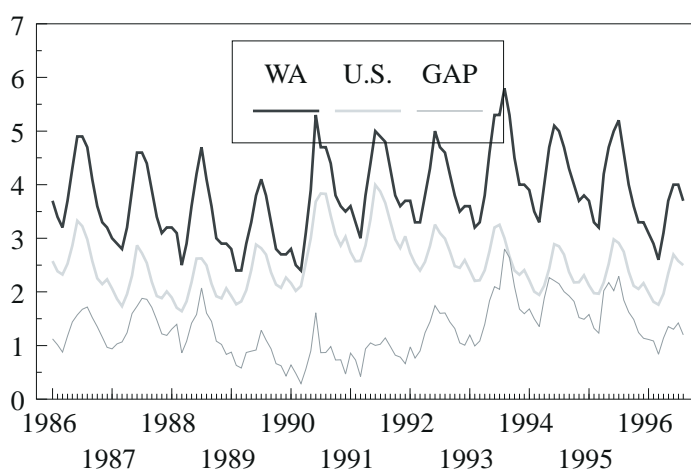
The most common cited reason for Washington's high unemployment rate is the large number of seasonal industries. These include food processing, timber removal, fishing, construction, and tourism. According to the seasonality hypothesis, Washington has a disproportionate amount of seasonal employment, many in high unemployment industries. These industries bias the state's unemployment rate upward.

Is unemployment or employment in Washington more seasonal than in most other states, and is this a contributing factor to Washington's high unemployment rate? Chart 4.6 tracks the insured unemployment rate for Washington and the U.S. It is clear that the series for Washington is more seasonal than that of the U.S. —though the difference is hardly dramatic. The standard deviation of Washington's unemployment rate, for example, is .75 percent compared with .5 percent for the U.S.

But the more interesting part of this chart is not the seasonal component, but the structural part that does not vary from month to month. This part is consistent with having an active labor market, with

**Chart 4.6**

Insured Unemployment Rates in Washington and the U.S.



6 David Card and Alan Krueger (1993, 1995) have muddled the waters lately in a number of provocative studies showing that minimum wage laws may increase employment.

jobs being created and destroyed at high rates. The Department of Employment Security, for example, estimated that in 1994, an average of 106,500 jobs were created **each month**, implying that an average of over 102,000 jobs were destroyed monthly since total net employment for the year rose only 52,000<sup>7</sup> The bulk of the workers in Chart 4.6, at both the national and state level, consist not of seasonal workers, but rather workers who have lost their jobs as a by-product of a dynamic market system weeding out jobs producing goods not in demand and replacing them with jobs producing goods in demand.

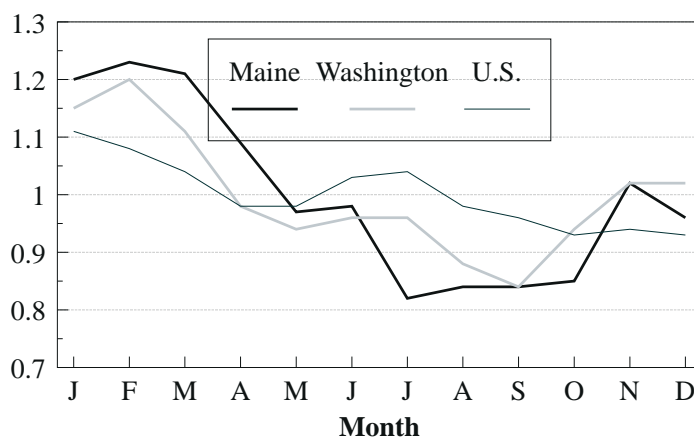
There are a number of problems with the seasonality hypothesis. First, it is not clear that employment and unemployment in Washington are that “seasonal” compared with other states. To see this, consider the 1995 seasonal factors for the unemployment rate for Washington, the U.S., and Maine—the most seasonal state (Chart 4.7). Washington’s seasonal factors are much less variable than Maine’s, and slightly more variable than the U.S.’s. Table 4.3 lists the standard deviation of the 1995 seasonal factors for the 10 states with the greatest employment and unemployment seasonality. According to the table, Washington is the 13th most seasonal unemployment and 22nd most seasonal employment state. This is not surprising. Despite Puget Sound’s long season of rain, winters—at least in Western Washington—are not that severe compared to other states.

A second flaw in the seasonality hypotheses is that it presumes having seasonal industries raises the unemployment rate. Whether this is so is questionable. In Table 4.3, for example, four states with highly seasonal unemployment rates, South Dakota, Iowa, North Dakota, and Wisconsin, were among the bottom ten unemployment states in 1995. In fact, North and South Dakota’s unemployment rate has not risen above the U.S.’s the past 19 years. Seasonality does not necessarily imply higher unemployment.<sup>8</sup>

A third flaw is that the hypothesis ignores the link between seasonality and insuring unemployment. An unemployment insurance system, particularly one that is not fully experienced based, widens swings in seasonal unemployment. The greater the benefits, the wider the swings (Feldstein, 1994). Washington’s unemployment insurance system is only partially experienced based, since the maximum rate is capped at 5.2 percent of wages on the first 20,700 of earnings. The UI system, thus, contributes to seasonality.

**Chart 4.7**

1995 Seasonal Factors for Unemployment  
Seasonal Factor



7 Consider, also, that in 1996 a little over 49,000 workers filed for unemployment insurance each month.

8 Consider, for example, that although education is highly seasonal because of summer vacation, its contribution to the unemployment rate in Chart 4.6 is small.



Table 4.3  
**Employment and Unemployment Seasonality**  
 Rankings

Employment Seasonality				Unemployment Seasonality			
	State	Standard Development of 1995 Seasonal Factors	Unemployment Rank		State	Standard Development of 1995 Seasonal Factors	Unemployment Rank
1	Alaska	5.00%	2	1	Maine	15.10%	25
2	Wyoming	3.10%	29	2	Idaho	14.80%	22
3	Maine	2.40%	25	3	Wyoming	14.40%	29
4	Montana	2.10%	19	4	Alaska	14.00%	2
5	Idaho	1.70%	22	5	North Dakota	13.80%	49
6	South Dakota	1.70%	48	6	Vermont	13.40%	33
7	Rhode Island	1.60%	25	7	Iowa	13.10%	45
8	Delaware	1.60%	22	8	Montana	12.90%	19
9	New Hampshire	1.60%	40	9	Wisconsin	12.20%	46
10	West Virginia	1.40%	3	10	South Dakota	11.90%	48
<b>22</b>	<b>Washington</b>	<b>1.20%</b>	<b>6</b>	<b>13</b>	<b>Washington</b>	<b>10.70%</b>	<b>6</b>



All this is not to say that seasonality does not contribute to higher unemployment rates. It might, but it does not appear to be a major contributor—and, therefore, does not add to our understanding for why there is a gap between the U.S. and state rate.

## **Part 7. The Anomaly Explained**

There is extensive research indicating that payroll taxes, such as social security and unemployment insurance taxes, are shifted back to labor through lower wages Hamermesh (1993). If this is so, it explains how Washington can grow so many jobs, all the while maintaining above average unemployment rates. Since firms do not ultimately pay the tax, they have every incentive to create jobs when opportunities arise. When workers are laid off, the UI system acts as a disincentive to quickly find new employment.

## **Part 8. An Unpleasant Tradeoff**

In the early 1970's wages in the U.S. began to diverge. Highly educated and skilled workers saw their wages rise. Those less well educated, and those with fewer skills saw their wages fall, in many instances, precipitously. At the same time, in major European economies another disturbing trend appeared. Unemployment, which had averaged 2.1 percent among the European members of the Organization for Economic Cooperation and Development (OECD) during the 1960's, began trending upward—rising even during expansions, to where they averaged 9.1 percent in the 1980's, and about 10 percent in the 1990's. Unemployment rates today stand at 7.9 percent in Britain, 8.3 percent in Denmark, 8.8 percent in Sweden, 11.3 percent in Germany, 12.7 percent in France, 14.3 percent in Belgium, 21.8 percent in Spain—and 5.3 percent in the U.S.

Only recently have economists begin to see a connection—technological progress—between these apparently unrelated trends. Technological progress has increased the demand for highly educated and skilled workers—at the expense of the less well educated and unskilled. In America this shift in demand has shown up as increased wage inequality. In Europe, with its more generous social safety net, it has shown up as higher unemployment.

Setting the level of unemployment benefits and their terms is a matter of confronting this unpleasant tradeoff. Policy makers could lower the state's unemployment rate by reducing benefits to make them more in line with those in other states. The group most hurt by such a move would be workers in the lower end of the wage distribution, since they are the more likely to lose their jobs, and, since their replacement ratios are higher, they tend to stay unemployed longer. The beneficiaries would be workers in the higher end of the distribution of earnings—who are assessed taxes not commensurate with their probable unemployment experience, and, to the extent the tax is not shifted to workers, businessmen.

## **Part 9. Concluding Comments**

High long-term unemployment rates are often a sign that something is fundamentally wrong—a recession, a depression, a massive shock to a state's primary industries. For Washington, it is byproduct of an equity-labor market flexibility tradeoff written into the UI statutes. Washington protects workers against unemployment better than just about any other state at a cost of having one of the nation's highest unemployment rates.

The UI program is a popular one in the state. It is seen as a program that benefits mainly working men and women during a difficult period of their life. There are not many workers clamoring to eliminate the program—although business groups lobby to keep tax rates and benefits down. This report does not take a position on how policy makers may improve the program, but suggests more thought into how the unemployment-equity tradeoff might be improved.

## References

Atkinson, Anthony B. and John Micklewright. “Unemployment Compensation and Labor Market Transitions: A Critical Review.” *Journal of Economic Literature*, December 1991, 29 (4), pp. 1679-1727.

Card, David and Alan B. Krueger. “Time-Series Minimum Wage Studies: A Meta Analysis,” *American Economic Review*, May 1995 85(2) pp. 238-243.

Card, David and Alan B. Krueger. “Minimum Wages and Employment: A Case Study of the Fast Food Industry in New Jersey and Pennsylvania.” *American Economic Review*, September 1994. 84(4), pp. 772-293.

Feldstein, Martin. Reply to Mortensen, in *Reducing Unemployment: Current Issues and Policy Options*, Federal Reserve Bank of Kansas City, 1994 pp. 221-230.

Hamermesh, Daniel. *Labor Demand*, Princeton and Chichester, U.K.: Princeton University Press 1993.

Heckman, James J. Commentary on Katz, in *Reducing Unemployment: Current Issues and Policy Options*, Federal Reserve Bank of Kansas City, 1994 pp. 291-312.

Katz, Lawrence. “Active Labor Market Policies to expand Employment and Opportunity” in *Reducing Unemployment: Current Issues and Policy Options*, Federal Reserve Bank of Kansas City, 1994 pp. 239-290.

Krugman, Paul. “Past and Prospective Causes of High Unemployment”, in *Reducing Unemployment: Current Issues and Policy Options*, Federal Reserve Bank of Kansas City, 1994 pp. 49-80.

Layard, Richard, Stephen Nickel, and Richard Jackman. *Unemployment: Macroeconomic Performance and the Labor Market*, Oxford, UK: Oxford University Press, 1991.

Ljungqvist, Lars, and Thomas Sargent. “A Supply Side Explanation of European Unemployment” *Federal Reserve Bank of Chicago, Economic Perspectives—September-October 96* pp. 2-15.

Martin, John P. “The Extent of High Unemployment in OECD Countries”, in *Reducing Unemployment: Current Issues and Policy Options*, Federal Reserve Bank of Kansas City, 1994 pp. 5-40.

Meyer, Bruce D. “Lessons From the U.S. Unemployment Insurance Experiments”, *Journal of Economic Literature*, March 1995 pp. 91-131.

Meyer, Bruce D. “Unemployment Insurance and Unemployment Spells”, *Econometrica*, 1990, 58, pp. 757-782.

Mortensen, Dale T. “Reducing Supply-Side Disincentives to Job Creation”, in *Reducing Unemployment: Current Issues and Policy Options*, Federal Reserve Bank of Kansas City, 1994 pp. 169-184.

1994 Green Book, U.S. Department of Social Welfare.

# Washington and U.S. Per Capita Income Growth

This paper is the latest in a series which examines trends in Washington and U.S. per capita income. The personal income data are from the September 1996 release of annual state personal income by the U.S. Department of Commerce, Bureau of Economic Analysis (BEA). The personal income estimates incorporate the comprehensive revision of the national income and product accounts. The impact of this revision on Washington personal income is described in “Washington Annual Personal Income, 1969 to 1995 ” in the September 1996 Economic and Revenue Forecast. As in the earlier papers, this study analyzes the causes of divergent trends in per capita income growth between Washington State and the United States by decomposing per capita income into its constituent parts. Regional differences in per capita income can be attributed to differences in per capita earnings income and differences in per capita non-earnings income. Differences in per capita earnings income can be further broken down into differences in average earnings (earnings/employment) and differences in the job ratio (employment/population). Finally, differences in average earnings can be attributed to differences in industry mix and differences in average earnings within industries (differential regional earnings). The paper also considers how these components affect Washington’s rank among the fifty states and District of Columbia in 1995. For a detailed discussion of the methodology, please refer to “Divergent Trends in Per Capita Personal Income” published in the November 1990 Economic and Revenue Forecast.

Chart 5.1 shows that Washington per capita income has generally been above the national average. Washington per capita income was close to U.S. per capita income in the early seventies, following massive layoffs in the aerospace industry. After 1972, however, Washington per capita income growth exceeded U.S. growth in every year of the seventies except 1977 as can be seen in Chart 5.2. By 1979, Washington per capita income was 8.1 percent higher than U.S. per capita income. Washington per capita income growth was lower than the national average in during most of the eighties, however. By 1988, Washington per capita income was 0.9 percent lower than U.S. per capita income. Washington’s economy was much stronger than the national economy from 1989 through 1992, a period that saw a huge expansion at Boeing and a national, but not local, recession. In 1992 Washington per capita income was again 4.3 percent higher than the U.S. average. Washington personal income declined relative to the U.S. in each of the last three years, as the aerospace cycle turned down again, but was still 2.4 percent above average in 1995.

## Industry Mix

Chart 5.3 illustrates the effect of differences in the mix of industries in Washington from the national mix. As mentioned above, differences in average earnings can result from differences in the mix of industries or from differences in average earnings within particular industries. In order to quantify the effect of industry mix on average earnings, a hypothetical earnings series has been calculated for Washington. Washington hypothetical earnings are those which would have occurred if all Washington employment in each industry had been compensated at the national rate of average earnings. Average earnings were calculated at as disaggregated a level as possible which was generally at the two-digit SIC level. Since both the U.S. actual average earnings and Washington hypothetical average earnings are calculated using the same (U.S.) average earnings by industry, the differences between the two are due only to differences in industry mix between the two regions. While the gap has varied, Washington hypothetical average earnings have been consistently lower than U.S. average earnings, implying that industry mix is unfavorable to Washington relative to the nation. The gap narrowed during the aerospace expansion of the late 80's and was only 0.7 percent less than U.S. in 1990. The gap has widened, though, along with the cutbacks at Boeing. In 1995, the unfavorable industry mix in Washington resulted in average earnings that are 2.1 percent lower than they would have been with the U.S. industry mix. The effect on per capita income is to lower Washington personal income relative to U.S. personal income by 1.5 percent.

## Differential Regional Earnings

Differential regional earnings refers to the impact of differences in average earnings per job between regions exclusive of differences in industry mix. This component is measured by comparing Washington hypothetical average earnings with Washington actual average earnings. Both these series are calculated with Washington employment patterns so industry mix is not a factor, but Washington hypothetical average earnings is calculated with U.S. average earnings by industry while the Washington actual average earnings is calculated with Washington average earnings by industry.

Chart 5.4 illustrates average earnings trends in Washington State and the United States. Washington average earnings, excluding mix effects, have usually been much higher than the U.S. average. At the peak in 1980, Washington overall average earnings were 8.1 percent higher than they would have been with U.S. average earnings on an industry by industry basis. Washington average earnings declined relative to U.S. average earnings for the next eight years, however. By 1988, Washington actual average earnings were 4.6 percent lower than hypothetical average earnings. Washington average earnings have recovered much of the lost ground since 1988. In 1995, Washington average earnings were 3.0 percent above the comparable national rate adding 2.1 percent to Washington per capita income relative to the nation. It should be noted that the measure of differential earnings used here is expressed in nominal terms. Inter-regional differences in wage rates largely reflect differences in living costs. In fact, the performance of Washington wages relative to the U.S. wages corresponds closely with the performance of the Seattle consumer price index relative to the U.S. city average consumer price index.

## **Job Ratio**

The job ratio is simply the ratio of the number jobs in the region to the population. Regional differences in the job ratio are equally important as differences in average earnings in terms of their contributions to relative per capita income. Differences in the job ratio can result from differences in the unemployment rate, differences in labor force participation, and differences in multiple job holding. A limitation of this measure is that jobs are measured on a place of work basis while population is measured on a place of residence basis. As a result, commuting patterns can also affect the job ratio. As Chart 5.5 illustrates, there is an upward trend in the job ratio for both Washington and the United States due to increasing rates of labor force participation.

Washington's job ratio has been similar to the nation's with two exceptions. The first was in the early seventies following the severe downturn in the aerospace industry. The Washington and national job ratios began to diverge in the late eighties, though. As the U.S. economy slowed, Washington's economy actually accelerated and when the national recession began, Washington's economy continued to grow. The Washington job ratio peaked in 1990, the same year as the peak in the U.S. job ratio. While the number of jobs in Washington continued to grow, the population rose even faster. The U.S. job ratio has recovered more sharply since the recession than has Washington's. Washington's job ratio was 1.2 percent higher than the national average in 1995 adding 0.8 percent to Washington per capita income relative to the nation.

## **Per Capita Non-Earnings Personal Income**

The final factor affecting relative per capita income is per capita non-earnings income. Non-earnings income consists of transfer payments, property income (dividends, interest, and rent), a residence adjustment, and personal contributions for social insurance (a negative component). The residence adjustment is the difference between place of residence earnings and place of work earnings. Chart 5.6 shows that the level of Washington per capita non-earnings income has exceeded the national average since 1969. Overall, Washington per capita non-earnings income in 1995 was 3.3 percent higher than the U.S. average, adding 1.0 percent to Washington per capita income relative to the nation.

## **Component Contributions to Per Capita Income Growth**

Charts 5.7 through 5.10 show the four basic determinants of per capita income in terms of their contributions to Washington relative per capita income growth. The sum of these components is approximately equal to the difference between Washington per capita income growth and U.S. per capita income growth. The graphs are all on the same scale so that the relative contributions of the components can be compared. Contrary to popular opinion, changes in the mix of industries in Washington has had little impact on the rate of growth of Washington per capita income relative to the U.S. as can be seen in Chart 5.7. In four of the five years since 1990, changes in industry mix have been unfavorable to Washington. It is no coincidence that this period corresponds to the downturn in the aerospace cycle. Washington's deteriorating industry mix over this period reduced per capita income relative to the U.S. by only 1.0 percent, however. As can be seen in Chart 5.8, changes in average earnings within industries have historically had a much greater impact on per capita



income than have changes in the mix of industries. Fortunately for Washington, this component has remained favorable in spite of the weaker economy since 1990. Above average wage growth in four of the last five years added a total of 3.9 percent to Washington per capita income relative to the nation. The job ratio has also been an important factor in relative per capita income growth over the years as shown in Chart 5.9. The aerospace downturn resulted in relatively weak growth in the job ratio in the 1990's after several years of strong growth in the late 1980's. Washington's job ratio has declined relative to the nation's in four of the last five years, costing Washington per capita income growth 2.5 percent since 1990. The final determinant of relative per capita income, per capita non-earnings personal income, has had little effect on relative per capita income growth as can be seen in Chart 5.10. While the level of per capita non-earnings income is higher in Washington, the growth rate tends to be fairly close. In addition, non-earnings sources of personal income represent less than 30 percent of total personal income, further limiting the impact changes in relative non-earnings income has on relative total personal income. Since 1990, slightly below average per capita non-earnings income growth has resulted in a loss of 0.3 percent of Washington per capita income relative to the nation. The net result of all four components is a slight 0.1 percent improvement in Washington per capita income relative to the U.S. average since 1990. This must be regarded favorably considering the relatively weak Washington economy during this period.

## Washington's Rank

Table 5.1 shows Washington's position among the states in terms of per capita income in 1995 (The Regional Measurement Division of the BEA treats the District of Columbia as a state for statistical purposes). A state's per capita income in this table is expressed as a percentage above or below the U.S. average. Washington per capita income in 1995 was 2.4 percent above the national average, yielding a rank of 19th among the 51 states (including the District of Columbia). Relative per capita incomes range from 44.2 percent above the U.S. average in the District of Columbia to 28.1 percent below average in Mississippi. The next four columns indicate the extent to which each of the components contributes to relative per capita income in 1995. The sum of these four components is approximately equal to the relative per capita income shown in the first column.

The District of Columbia has, by far, the most favorable mix of industries in the U.S. Other things being equal (differential regional earnings, job ratio, and per capita non-earnings income), this favorable mix of industries would be sufficient to raise per capita income in the District 10.0 percent above the U.S. average. The average earnings of federal civilian employees is more than 50 percent higher than the average for all industries. Most of the other states near the top of this list are in the highly industrialized regions of the Great Lakes and Northeast. At the opposite extreme are Hawaii and Nevada at -7.3 percent and -7.0 percent. What these states have in common is a disproportionate reliance on relatively low-paying tourism industries. While Washington State is well down the list at 31st among the states in 1995, the relatively unfavorable mix of industries knocked only 1.5 percent off Washington per capita income relative to the nation.

Differential regional earnings also affect per capita income through their effect on average earnings. Once again the District of Columbia tops the list. The relatively high wages in the District of Columbia would, by themselves, be sufficient to raise per capita income 28.6 percent above the national average. At the opposite extreme is North Dakota where low wage rates reduce per capita income by 18.3 percent relative to the nation. It should be noted that this range would be much narrower if the wage rates were corrected for differences in living costs among the states. Since

labor is mobile, it would not be possible for such disparities in wages to persist without offsetting differences in the cost of living. Urban areas tend to have higher living costs as well as higher wages so it is not surprising that most of the states near the top of this list are highly urbanized. Since the District of Columbia has the distinction of being the only state that is entirely urban, it is not surprising that it also has the highest wages. Washington is a middle-of-the-road state in this respect as well. Slightly higher than average differential regional earnings added 2.1 percent to per capita income in Washington State in 1995, resulting in a rank of 14th among the states.

The final earnings related component is the job ratio. The job ratio is determined primarily by the unemployment rate in a region. Demographic and other factors affecting labor force participation can also play a role. The job market does not explain the extremely positive impact of this component on the District of Columbia where the job ratio raises per capita income by 95.7 percent. The problem with this component is that employment is measured on a place of work basis while population is measured on a place of residence basis. This is not a serious problem in states where cross-border commuting is balanced or where the number of such commuters is small relative to the job market. In the District of Columbia, however, there are actually more jobs than people and many of those jobs are held by residents of neighboring states. Excluding the unusual case of the District of Columbia, the state with the highest job ratio in 1995 was Nebraska where it added 11.6 percent to relative per capita income. At the bottom of the list is West Virginia where the low job ratio reduced per capita income by 13.1 percent in 1995. Washington State appears near the middle of this list as well. Ranked 30th among the states, a higher than average job ratio added 0.8 percent to Washington personal income in 1995 relative to the U.S. average.

The final factor affecting per capita income is per capita non-earnings personal income, mainly property income and transfer payments. Residents of higher income states tend to have more property, and therefore more property income. Transfer payments tend to be higher in states with large concentrations of retired people. Non-earnings per capita income added 14.7 percent to total per capita income in Connecticut in 1995. After being ranked 1st in the other three categories, the District of Columbia was dead last in per capita non-earnings income. This category, by itself, reduced per capita income in 1995 by 151.9 percent. Just as employment exceeds the population in the District of Columbia, earnings exceed total personal income, meaning that non-earnings income is negative. This anomaly results from the fact that earnings are on a place of work basis while total personal income is on a place of residence basis. The earnings that residents of other states take home from jobs in the District of Columbia results in a very large, negative residence adjustment for the District of Columbia. The next worst state in terms of non-earnings income was Utah where this component reduced per capita income by 11.6 percent. Washington State ranked 10th in per capita non-earnings income in 1995 but this added only 1.0 percent to Washington total per capita income relative to the nation.

## **The Problem of Cross-Border Commuting**

The “residence adjustment” component of personal income accounts for the net earnings of commuters who cross state borders. The “net earnings by place of residence” component of personal income is adjusted by this residence adjustment as well as by personal contributions for social insurance. It is, therefore, a measure of the net earnings of the residents of a state rather than the gross earnings of those employed in a state. In Table 5.2, the relative contributions of earnings and non-earnings as previously defined are contrasted with the contributions of net earnings and net

non-earnings. The contribution of earnings reflects the combined influence of industry mix, differential regional earnings, and the job ratio. The non-earnings component is the same as in Table 5.1. The contribution of net earnings also reflects the industry mix, differential regional earnings, and job ratio. Unfortunately, net earnings cannot be disaggregated. The earnings and non-earnings components sum to the relative per capita income in the first column as do the net earnings and net non-earnings components.

Correcting for residence has the most pronounced effect on the results for the District of Columbia. The contribution of earnings drops from 196.1 percent to a still high, but more plausible, 24.8 percent. The contrast in non-earnings is even more dramatic. Per capita net non-earnings added 19.4 percent to the per capita income of the residents of the District of Columbia relative to the U.S. average rather than reducing it by 151.9 percent, moving its rank up from last to first among the states. For the other states, the difference is much less dramatic. The states that rank high in the contribution of earnings and non-earnings also tend to rank high in net earnings and net non-earnings. For Washington State, the correction for residence increases the contribution of per capita earnings from 1.5 percent to 2.2 percent of per capita income even though Washington's rank drops from 15th to 18th. The higher contribution of net earnings reflects the fact that Washington residents receive more income from jobs in other than states than vice versa. While net earnings cannot be decomposed, the positive residence adjustment for Washington indicates that Washington's job ratio is almost certainly understated. The correction for residence reduces the contribution of per capita non-earnings income from 1.0 percent to just 0.2 percent and lowers Washington's rank from 11th to 14th. In other words, Washington's apparently above average gross non-earnings personal income is almost entirely due to the residence adjustment.

## **The Outlook for Washington Per Capita Income**

Charts 5.11 and 5.12 indicate the outlook for Washington per capita income growth relative to the United States in the March 1997 economic forecast. There are some differences in the concepts shown in these charts from the previous charts because the concepts in the economic forecast are not identical to the history provided by the Commerce Department in its state annual personal income estimates. The Washington population estimate used in the forecast is provided by Washington's Office of Financial Management rather than the Commerce Department. Also, total earnings and total employment are not available in the forecast. Total wage and salary disbursements and nonfarm wage and salary employment were used to calculate an average wage estimate. Finally, since average wages by industry are not available in the U.S. economic forecast, it was not possible to separate the industry mix effect from differential regional earnings.

Chart 5.11 shows that the March economic forecast expects Washington per capita income to remain higher than the national average and for the gap to widen. Chart 5.12 decomposes the expected relative growth of Washington per capita income into its average wage, job ratio, and per capita non-wage components. Growth in Washington average wages, which has generally exceeded the national average in the 1990's, is expected to continue to outpace U.S. average wage growth due to the resurgent local economy. Above average wage growth is expected to add a total of 0.9 percent to Washington per capita income relative to the U.S. during the next four years. After four years of below average growth, the job ratio is expected to begin adding to Washington relative per capita income growth in 1996 due again to the strong economic outlook. An expected increase in the rate of Washington population growth will offset much of the benefit of higher employment growth,



however. This component is expected to add a total of only 0.1 percent to Washington relative per capita income. The non-wage contribution to relative per capita income growth is expected to be negative in the coming years mainly as a result of lagging per capita transfer payments. The expected upturn in population growth will be mainly in the working age population which receives relatively less in transfer payments than the retired population. Other things being equal, below average growth in per capita non-wage income is expected to cost Washington per capita income 0.7 percent by 1999. The combined effect of these three components is expected to add a total of only 0.3 percent to Washington per capita income relative to the nation over the four year interval.

# U.S. and Washington Per Capita Income 1969 to 1995

CHART 5.1  
Real Per Capita Income

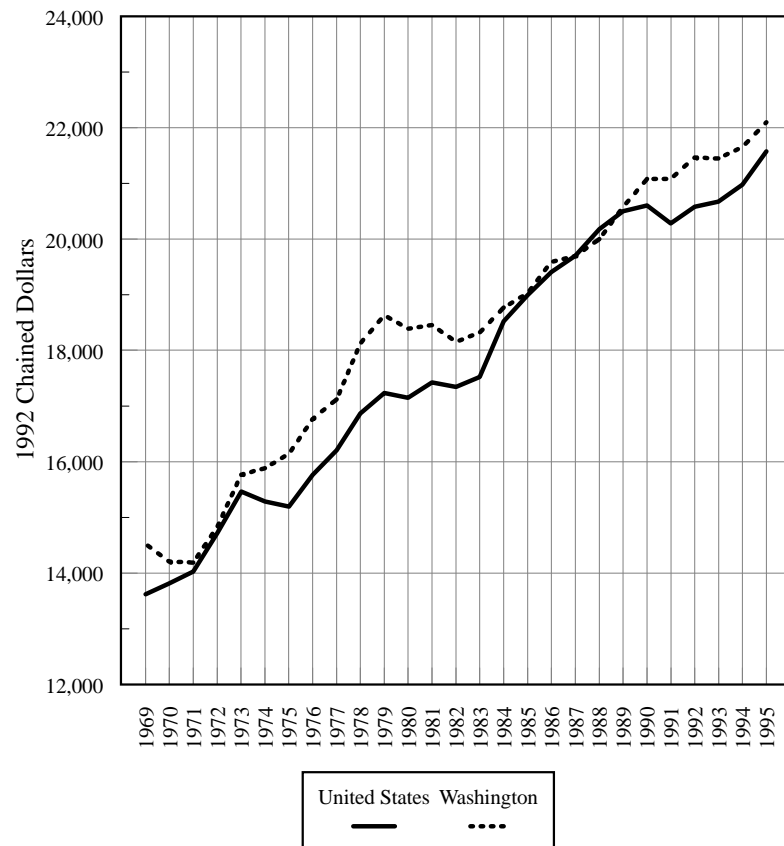
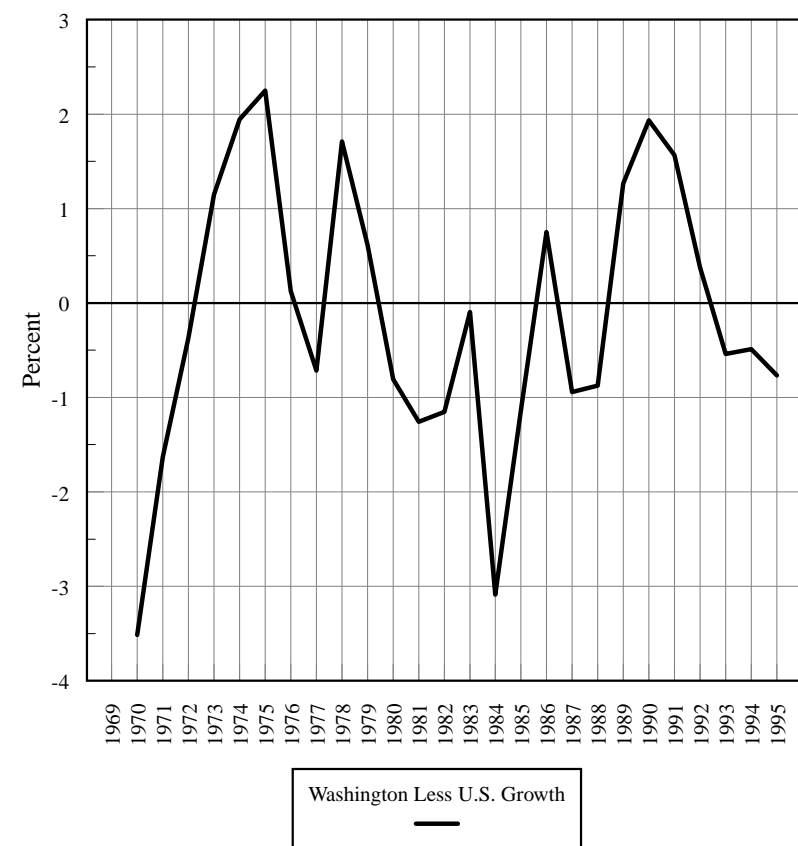


CHART 5.2  
Relative Per Capita Income Growth



# Determinants of Relative Per Capita Income

CHART 5.3  
Industry Mix

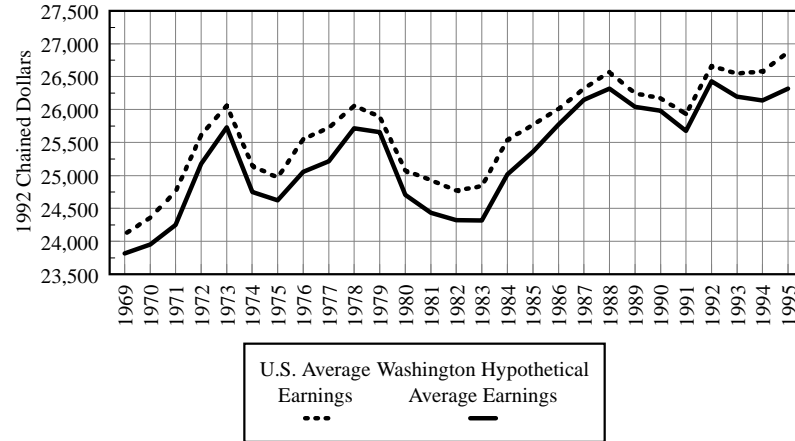


CHART 5.4  
Differential Regional Earnings

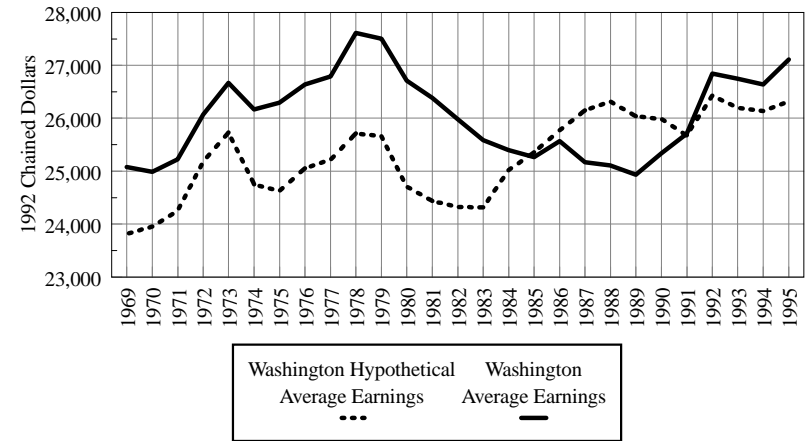


CHART 5.5  
Job Ratio

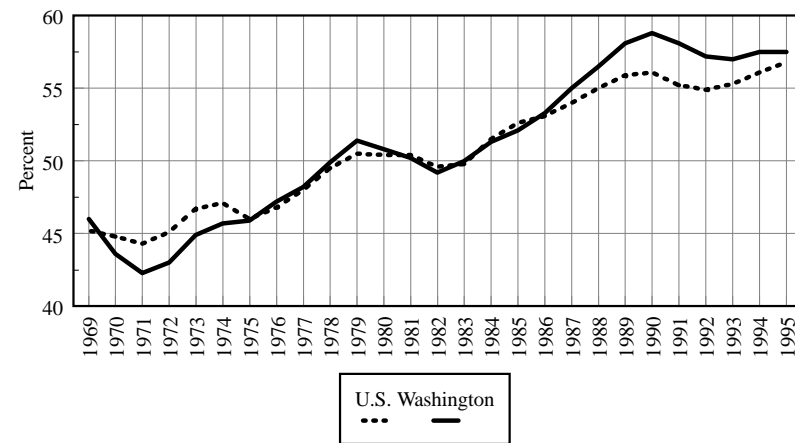
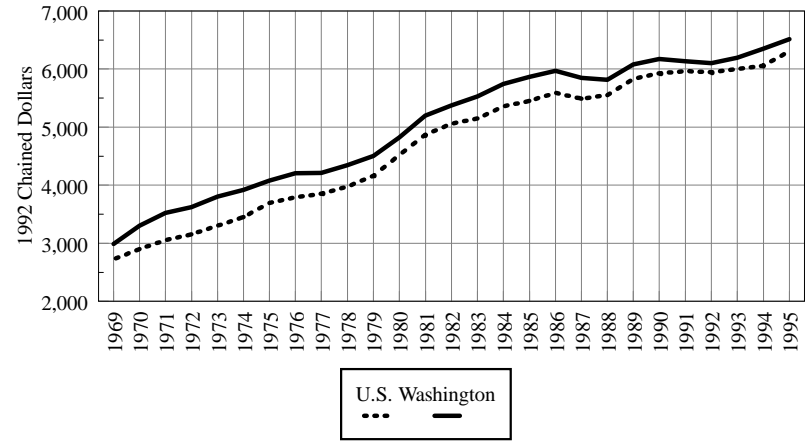


CHART 5.6  
Per Capita Non-Earnings Income



# Component Contributions to Relative Per Capita Income Growth

CHART 5.7  
Industry Mix

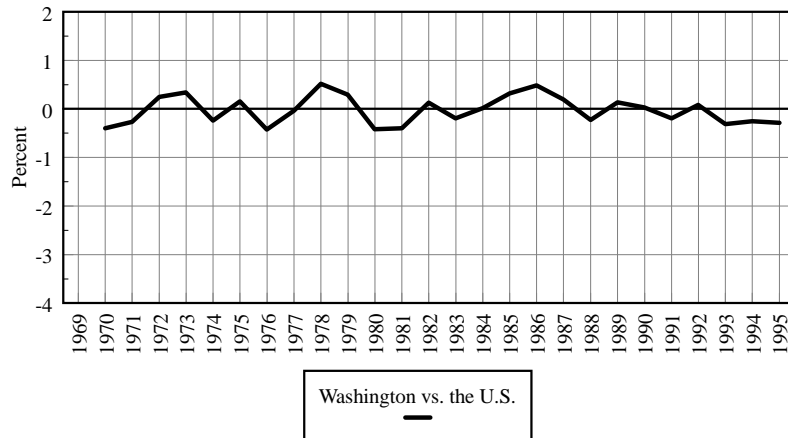


CHART 5.8  
Differential Regional Earnings

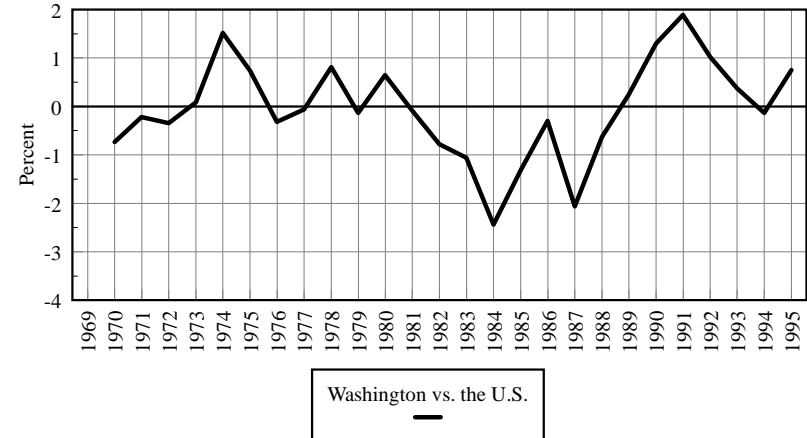


CHART 5.9  
Job Ratio

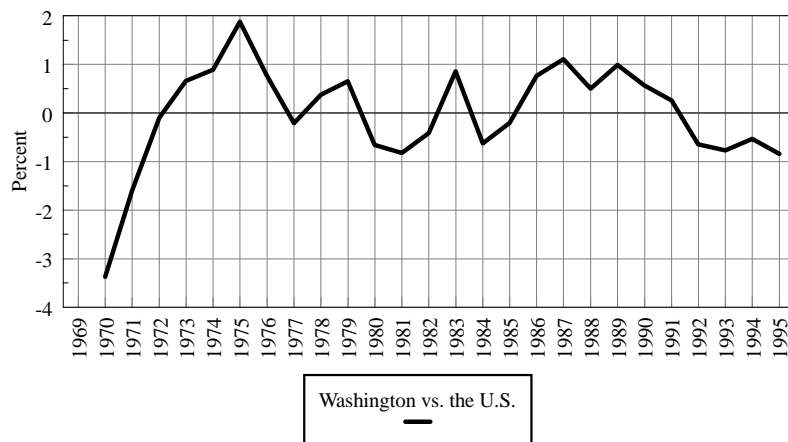
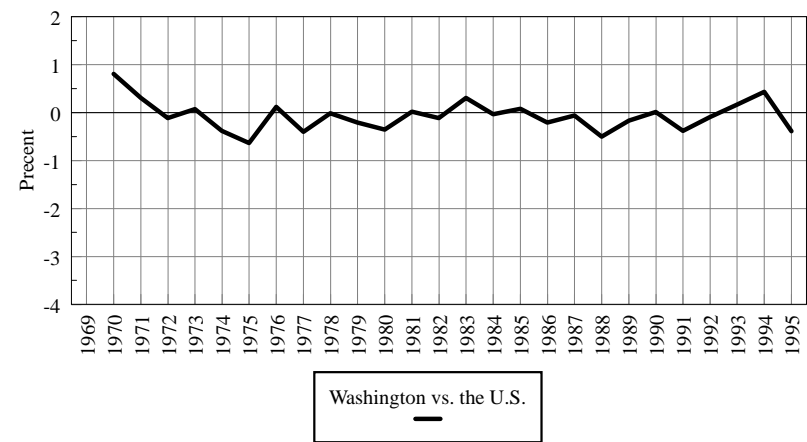


CHART 5.10  
Per Capita Non-Earnings Income



## U.S. and Washington Per Capita Income Forecast 1995 to 1999

CHART 5.11  
Real Per Capita Income

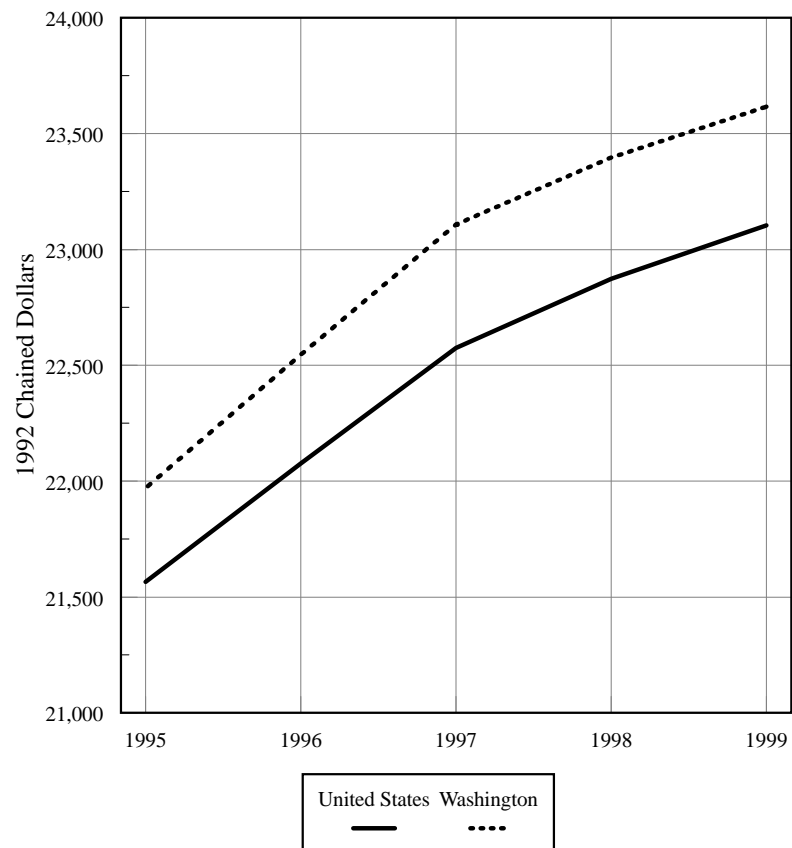


CHART 5.12  
Component Contributions to Relative Per Capita Income Growth

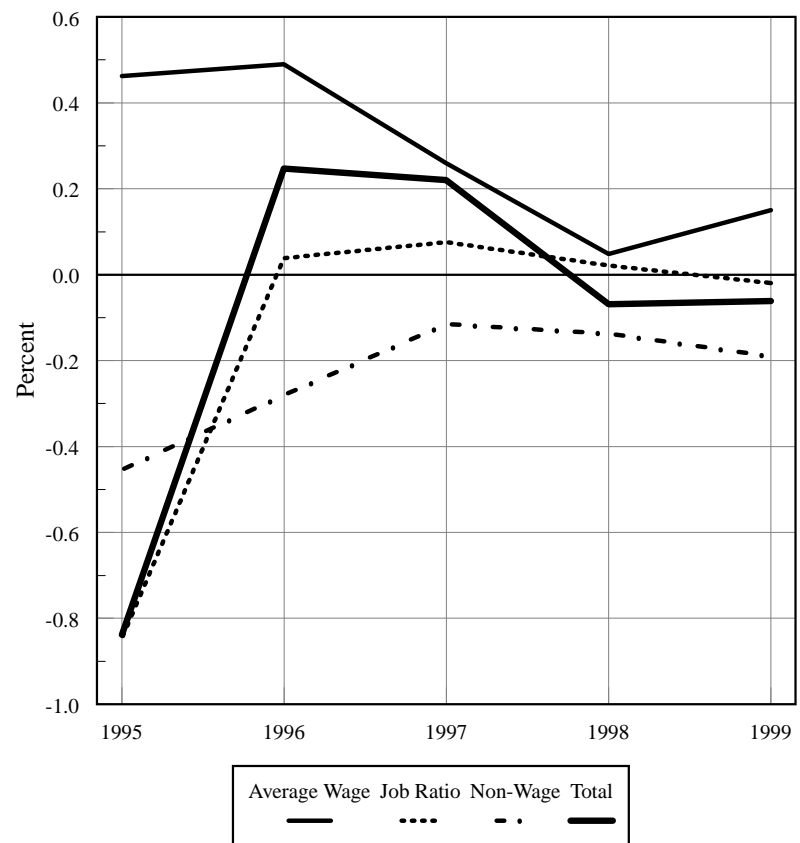


Table 5.1

**Component Contributions to Relative Per Capita Income**

Rank	Per Capita Income		Industry Mix		Differential Regional Earnings		Job Ratio		Non-Earnings	
1	D.C.	44.2	D.C.	10.0	D.C.	28.6	D.C.	95.7	Connecticut	14.7
2	Connecticut	36.9	Michigan	3.8	New York	16.2	Nebraska	11.6	New Jersey	14.5
3	New Jersey	28.6	Delaware	3.3	Connecticut	12.7	North Dakota	10.4	Maryland	13.7
4	Massachusetts	20.7	West Virginia	3.2	New Jersey	12.3	Minnesota	10.4	Florida	11.0
5	New York	19.3	New Jersey	3.2	Alaska	9.6	Colorado	10.3	New Hampshire	10.3
6	Maryland	13.5	Connecticut	3.2	California	9.0	South Dakota	9.9	Rhode Island	8.9
7	Delaware	13.2	Indiana	2.9	Nevada	8.9	Iowa	8.3	New York	5.3
8	New Hampshire	10.3	Illinois	2.9	Massachusetts	8.2	Vermont	8.3	Pennsylvania	3.7
9	Illinois	8.7	Ohio	2.5	Hawaii	7.3	Wyoming	8.3	Massachusetts	3.6
10	Hawaii	5.9	New York	2.2	Delaware	4.9	Kansas	7.9	Virginia	2.9
11	Nevada	5.1	Massachusetts	1.9	Illinois	3.3	Nevada	6.9	<b>Washington</b>	<b>1.0</b>
12	California	3.7	Pennsylvania	1.5	Michigan	3.1	Delaware	6.8	Illinois	0.9
13	Alaska	3.4	Louisiana	0.5	Maryland	2.3	Hawaii	6.8	California	0.7
14	Virginia	3.3	Missouri	0.3	<b>Washington</b>	<b>2.1</b>	Alaska	6.1	Hawaii	0.0
15	Minnesota	3.3	Wisconsin	0.2	Pennsylvania	0.2	Massachusetts	5.9	Kansas	-0.0
16	Colorado	3.2	Kentucky	0.1	Texas	-0.6	Wisconsin	5.9	Maine	-0.2
17	Michigan	3.0	Alabama	0.1	Georgia	-1.7	North Carolina	4.7	Michigan	-0.4
18	Rhode Island	2.7	Tennessee	-0.0	Virginia	-1.9	Connecticut	4.7	Vermont	-0.8
19	<b>Washington</b>	<b>2.4</b>	Georgia	-0.3	Colorado	-2.4	Missouri	4.5	West Virginia	-1.1
20	Pennsylvania	1.5	Kansas	-0.4	Minnesota	-3.0	New Hampshire	4.5	Wyoming	-1.2
21	Florida	-0.6	Utah	-0.5	New Hampshire	-3.6	Tennessee	3.6	Montana	-1.2
22	Ohio	-3.0	Maryland	-0.6	Ohio	-4.2	Virginia	3.2	Wisconsin	-1.3
23	Wisconsin	-4.1	New Hampshire	-0.6	Rhode Island	-4.2	Oregon	3.1	Ohio	-1.4
24	Kansas	-5.9	Texas	-0.7	Oregon	-4.3	Utah	2.4	Arizona	-1.8
25	Missouri	-6.0	Arkansas	-0.7	Arizona	-4.6	Indiana	2.3	Iowa	-2.0
26	Georgia	-6.3	Minnesota	-0.7	Florida	-4.7	Georgia	1.9	Colorado	-2.2

Table 5.1

**Component Contributions to Relative Per Capita Income**

Rank	Per Capita Income		Industry Mix		Differential Regional Earnings		Job Ratio		Non-Earnings	
27	Oregon	-6.9	Virginia	-0.7	North Carolina	-6.2	Illinois	1.4	Missouri	-2.6
28	Nebraska	-7.5	North Carolina	-0.9	Tennessee	-6.4	Montana	1.2	Delaware	-2.8
29	Indiana	-7.6	Rhode Island	-1.1	Missouri	-7.7	Maine	1.1	Oregon	-2.8
30	Vermont	-8.6	Mississippi	-1.2	Indiana	-8.0	<b>Washington</b>	<b>0.8</b>	Minnesota	-2.9
31	Texas	-8.6	<b>Washington</b>	<b>-1.5</b>	Wisconsin	-8.2	Idaho	0.7	Nevada	-2.9
32	North Carolina	-9.1	South Carolina	-1.5	Alabama	-8.2	Ohio	0.3	Louisiana	-3.3
33	Tennessee	-9.3	Oklahoma	-1.6	Louisiana	-9.0	Texas	-0.8	Oklahoma	-3.4
34	Iowa	-9.9	California	-1.7	Idaho	-9.5	Rhode Island	-1.0	South Dakota	-3.4
35	Wyoming	-10.8	Arizona	-1.9	South Carolina	-9.7	Arkansas	-1.3	Nebraska	-3.9
36	Arizona	-11.7	Colorado	-2.0	New Mexico	-10.4	New Jersey	-1.6	Indiana	-4.4
37	Maine	-13.3	Maine	-2.0	Nebraska	-10.6	South Carolina	-1.7	North Dakota	-4.9
38	South Dakota	-15.6	Wyoming	-2.4	Utah	-11.4	Maryland	-1.8	Alabama	-4.9
39	Alabama	-17.4	Vermont	-2.4	Kentucky	-11.5	Oklahoma	-2.2	Kentucky	-5.4
40	South Carolina	-18.1	Iowa	-2.6	Kansas	-12.0	Kentucky	-2.4	New Mexico	-5.6
41	Louisiana	-18.2	Alaska	-2.6	Iowa	-12.3	Michigan	-3.3	South Carolina	-5.7
42	Idaho	-18.5	New Mexico	-2.7	Vermont	-12.4	California	-3.7	Georgia	-6.1
43	Kentucky	-18.8	Oregon	-2.7	Maine	-12.4	Pennsylvania	-3.7	Tennessee	-6.2
44	North Dakota	-19.7	Nebraska	-2.8	Oklahoma	-13.5	New York	-3.9	Mississippi	-6.2
45	Oklahoma	-19.9	Florida	-3.3	Wyoming	-14.1	Arizona	-3.9	Arkansas	-6.3
46	Montana	-20.5	Idaho	-3.8	Arkansas	-14.2	New Mexico	-4.0	Idaho	-6.3
47	Utah	-21.4	South Dakota	-4.5	West Virginia	-14.3	Florida	-4.2	North Carolina	-6.3
48	New Mexico	-21.5	North Dakota	-5.0	Mississippi	-15.5	Alabama	-4.8	Texas	-6.6
49	Arkansas	-22.0	Montana	-5.1	South Dakota	-15.9	Mississippi	-7.1	Alaska	-9.9
50	West Virginia	-23.8	Nevada	-7.0	Montana	-16.1	Louisiana	-7.3	Utah	-11.6
51	Mississippi	-28.1	Hawaii	-7.3	North Dakota	-18.3	West Virginia	-13.1	D.C.	-151.9

Table 5.2

**Impact of Cross-Border Commuting**

Rank	Per Capita Income		Earnings		Non-Earnings		Net Earnings		Net Non-Earnings	
1	D.C.	44.2	D.C.	196.1	Connecticut	14.7	Connecticut	26.3	D.C.	19.4
2	Connecticut	36.9	Connecticut	22.2	New Jersey	14.5	D.C.	24.8	Connecticut	10.6
3	New Jersey	28.6	Massachusetts	17.2	Maryland	13.7	New Jersey	19.7	New York	10.2
4	Massachusetts	20.7	Delaware	16.0	Florida	11.0	Massachusetts	14.5	Florida	10.0
5	New York	19.3	New Jersey	14.1	New Hampshire	10.3	Maryland	11.2	New Jersey	8.9
6	Maryland	13.5	New York	14.0	Rhode Island	8.9	Delaware	10.5	Massachusetts	6.3
7	Delaware	13.2	Alaska	13.2	New York	5.3	New York	9.0	Rhode Island	5.3
8	New Hampshire	10.3	Nevada	8.0	Pennsylvania	3.7	New Hampshire	8.4	Pennsylvania	3.2
9	Illinois	8.7	Illinois	7.8	Massachusetts	3.6	Illinois	7.2	Delaware	2.7
10	Hawaii	5.9	Minnesota	6.1	Virginia	2.9	Alaska	7.0	Maryland	2.3
11	Nevada	5.1	Hawaii	5.9	<b>Washington</b>	<b>1.0</b>	Nevada	6.5	New Hampshire	1.9
12	California	3.7	Colorado	5.4	Illinois	0.9	Hawaii	5.7	Illinois	1.5
13	Alaska	3.4	Michigan	3.5	California	0.7	Colorado	5.3	California	1.0
14	Virginia	3.3	California	3.0	Hawaii	0.0	Minnesota	5.0	<b>Washington</b>	<b>0.2</b>
15	Minnesota	3.3	<b>Washington</b>	<b>1.5</b>	Kansas	-0.0	Virginia	4.2	Hawaii	0.2
16	Colorado	3.2	Virginia	0.5	Maine	-0.2	Michigan	3.8	Missouri	-0.3
17	Michigan	3.0	New Hampshire	-0.0	Michigan	-0.4	California	2.8	Michigan	-0.7
18	Rhode Island	2.7	Georgia	-0.2	Vermont	-0.8	<b>Washington</b>	<b>2.2</b>	Virginia	-0.9
19	<b>Washington</b>	<b>2.4</b>	Maryland	-0.2	West Virginia	-1.1	Georgia	-0.1	Ohio	-1.1
20	Pennsylvania	1.5	Ohio	-1.6	Wyoming	-1.2	Wisconsin	-1.0	Oregon	-1.2
21	Florida	-0.6	Texas	-2.1	Montana	-1.2	Indiana	-1.6	Nevada	-1.4
22	Ohio	-3.0	Pennsylvania	-2.1	Wisconsin	-1.3	Pennsylvania	-1.7	Maine	-1.6
23	Wisconsin	-4.1	North Carolina	-2.7	Ohio	-1.4	Texas	-1.7	Minnesota	-1.7
24	Kansas	-5.9	Wisconsin	-2.8	Arizona	-1.8	Ohio	-1.9	Wyoming	-1.7
25	Missouri	-6.0	Tennessee	-3.2	Iowa	-2.0	Rhode Island	-2.6	Vermont	-1.8
26	Georgia	-6.3	Indiana	-3.3	Colorado	-2.2	North Carolina	-3.1	Montana	-1.9



Table 5.2

**Impact of Cross-Border Commuting**

Rank	Per Capita Income		Earnings		Non-Earnings		Net Earnings		Net Non-Earnings	
27	Oregon	-6.9	Missouri	-3.4	Missouri	-2.6	Tennessee	-3.5	Colorado	-2.1
28	Nebraska	-7.5	Nebraska	-3.6	Delaware	-2.8	Kansas	-3.6	Kansas	-2.3
29	Indiana	-7.6	Oregon	-4.1	Oregon	-2.8	Nebraska	-4.8	Nebraska	-2.6
30	Vermont	-8.6	Kansas	-5.8	Minnesota	-2.9	Oregon	-5.7	West Virginia	-2.6
31	Texas	-8.6	Rhode Island	-6.2	Nevada	-2.9	Missouri	-5.7	Arizona	-2.7
32	North Carolina	-9.1	Vermont	-7.7	Louisiana	-3.3	Vermont	-6.7	Iowa	-2.8
33	Tennessee	-9.3	Iowa	-7.8	Oklahoma	-3.4	Iowa	-7.0	Wisconsin	-3.1
34	Iowa	-9.9	Wyoming	-9.6	South Dakota	-3.4	Utah	-9.0	South Dakota	-3.3
35	Wyoming	-10.8	Utah	-9.8	Nebraska	-3.9	Arizona	-9.0	North Dakota	-3.6
36	Arizona	-11.7	Arizona	-9.9	Indiana	-4.4	Wyoming	-9.1	Alaska	-3.6
37	Maine	-13.3	Florida	-11.6	North Dakota	-4.9	Idaho	-10.7	Louisiana	-4.4
38	South Dakota	-15.6	Idaho	-12.2	Alabama	-4.9	Florida	-10.7	Oklahoma	-5.3
39	Alabama	-17.4	South Dakota	-12.2	Kentucky	-5.4	South Carolina	-11.0	Tennessee	-5.9
40	South Carolina	-18.1	South Carolina	-12.4	New Mexico	-5.6	Alabama	-11.1	Kentucky	-5.9
41	Louisiana	-18.2	Alabama	-12.4	South Carolina	-5.7	Maine	-11.7	North Carolina	-6.0
42	Idaho	-18.5	Maine	-13.2	Georgia	-6.1	South Dakota	-12.4	Indiana	-6.0
43	Kentucky	-18.8	Kentucky	-13.4	Tennessee	-6.2	Kentucky	-12.9	Georgia	-6.2
44	North Dakota	-19.7	North Dakota	-14.8	Mississippi	-6.2	Louisiana	-13.8	Alabama	-6.2
45	Oklahoma	-19.9	Louisiana	-14.9	Arkansas	-6.3	Oklahoma	-14.7	New Mexico	-6.6
46	Montana	-20.5	Arkansas	-15.8	Idaho	-6.3	New Mexico	-14.9	Arkansas	-6.8
47	Utah	-21.4	New Mexico	-16.0	North Carolina	-6.3	Arkansas	-15.2	Texas	-6.9
48	New Mexico	-21.5	Oklahoma	-16.5	Texas	-6.6	North Dakota	-16.1	South Carolina	-7.1
49	Arkansas	-22.0	Montana	-19.3	Alaska	-9.9	Montana	-18.6	Idaho	-7.8
50	West Virginia	-23.8	Mississippi	-21.9	Utah	-11.6	Mississippi	-19.2	Mississippi	-8.9
51	Mississippi	-28.1	West Virginia	-22.6	D.C.	-151.9	West Virginia	-21.2	Utah	-12.4

# **Detail Components of the Washington Economic Forecast**

**Calendar Years**

Table A1.1  
**U.S. Economic Forecast Summary**  
 Forecast 1997 to 1999

	1992	1993	1994	1995	1996	1997	1998	1999
<b>Real National Income Accounts (Billions of 1992 Chained Dollars)</b>								
Real Gross Domestic Product	6244.4	6386.4	6608.7	6742.9	6911.0	7108.5	7259.9	7410.2
% Ch	2.7	2.3	3.5	2.0	2.5	2.9	2.1	2.1
Real Consumption	4219.8	4339.5	4473.1	4577.8	4690.6	4833.3	4958.1	5062.6
% Ch	2.8	2.8	3.1	2.3	2.5	3.0	2.6	2.1
Real Nonresidential Fixed Investment	557.9	593.7	652.1	714.3	766.2	818.2	856.7	882.3
% Ch	1.9	6.4	9.8	9.5	7.3	6.8	4.7	3.0
Real Residential Fixed Investment	225.6	242.7	268.9	262.7	276.8	279.7	281.4	282.6
% Ch	16.6	7.6	10.8	-2.3	5.4	1.0	0.6	0.4
Real Personal Income	5263.8	5338.3	5473.4	5684.2	5873.8	6061.7	6196.8	6313.6
% Ch	2.6	1.4	2.5	3.9	3.3	3.2	2.2	1.9
Real Per Capita Income (\$/Person)	20,580	20,656	20,967	21,565	22,076	22,575	22,873	23,103
% Ch	1.5	0.4	1.5	2.9	2.4	2.3	1.3	1.0
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator (Chain-Wt.,1992=1.0)	1.000	1.027	1.051	1.076	1.099	1.123	1.152	1.184
% Ch	3.3	2.7	2.4	2.4	2.1	2.2	2.6	2.8
U.S. Consumer Price Index (1982-84=1.0)	1.404	1.446	1.483	1.525	1.570	1.611	1.655	1.705
% Ch	3.0	3.0	2.6	2.8	2.9	2.7	2.7	3.0
Employment Cost Index (June 1989=1.0)	1.119	1.152	1.185	1.219	1.260	1.299	1.341	1.382
% Ch	2.9	2.9	2.9	2.9	3.3	3.2	3.2	3.1
<b>Current Dollar National Income (Billions of Dollars)</b>								
Gross Domestic Product	6244.4	6553.0	6935.7	7253.8	7580.0	7946.1	8302.8	8685.1
% Ch	5.5	4.9	5.8	4.6	4.5	4.8	4.5	4.6
Personal Income	5264.2	5480.1	5753.1	6115.1	6452.8	6805.4	7136.4	7476.0
% Ch	6.0	4.1	5.0	6.3	5.5	5.5	4.9	4.8
<b>Employment (Millions)</b>								
U.S. Civilian Labor Force	128.1	129.2	131.0	132.3	133.9	136.3	137.9	139.5
Total U.S. Employment	118.5	120.3	123.1	124.9	126.7	129.1	130.6	131.9
Unemployment Rate (%)	7.49	6.91	6.10	5.60	5.38	5.25	5.30	5.44
Wage and Salary Employment	108.59	110.73	114.15	117.20	119.55	122.05	124.00	125.54
% Ch	0.3	2.0	3.1	2.7	2.0	2.1	1.6	1.2
Manufacturing	18.11	18.08	18.32	18.47	18.28	18.22	18.10	18.03
% Ch	-1.6	-0.2	1.4	0.8	-1.0	-0.4	-0.7	-0.4
Durable Manufacturing	10.28	10.22	10.45	10.65	10.68	10.66	10.52	10.44
% Ch	-2.7	-0.5	2.2	2.0	0.2	-0.2	-1.3	-0.7
Nondurable Manufacturing	7.83	7.85	7.87	7.82	7.61	7.56	7.58	7.59
% Ch	-0.1	0.4	0.3	-0.7	-2.7	-0.6	0.2	0.1
Nonmanufacturing	90.49	92.65	95.83	98.73	101.27	103.83	105.90	107.51
% Ch	0.7	2.4	3.4	3.0	2.6	2.5	2.0	1.5
Services	29.05	30.19	31.57	33.10	34.36	35.62	36.75	37.69
% Ch	2.5	3.9	4.6	4.8	3.8	3.6	3.2	2.6
<b>Miscellaneous Indicators</b>								
Credit Outstanding/Disp. Income	17.4	18.0	19.7	21.3	21.5	21.8	21.6	21.7
Auto Sales (Millions)	8.2	8.5	9.0	8.7	8.5	8.2	8.0	8.0
% Ch	0.4	3.9	5.1	-3.2	-2.2	-3.4	-2.4	0.1
Housing Starts (Millions)	1.201	1.292	1.446	1.358	1.465	1.397	1.342	1.351
% Ch	19.1	7.5	12.0	-6.1	7.8	-4.7	-3.9	0.6
Federal Budget Surplus (Billions)	-280.9	-255.6	-190.2	-161.7	-125.7	-137.8	-131.5	-116.8
Net Exports (Billions)	-29.6	-62.7	-94.4	-94.7	-99.6	-122.7	-131.2	-122.0
3-Month Treasury Bill Rate (%)	3.43	3.00	4.25	5.49	5.01	5.24	5.35	5.20
30-Year U.S. Govt. Bond Rate (%)	7.67	6.60	7.37	6.88	6.70	6.77	7.05	6.95
Mortgage Rate (%)	8.40	7.33	8.36	7.96	7.81	7.96	8.27	8.18

Table A1.2  
**U.S. Economic Forecast Summary**  
 Forecast 1997 to 1999

	1994:1	1994:2	1994:3	1994:4	1995:1	1995:2	1995:3	1995:4
<b>Real National Income Accounts (Billions of 1992 Chained Dollars)</b>								
Real Gross Domestic Product	6508.5	6587.6	6644.9	6693.9	6701.0	6713.5	6776.4	6780.7
% Ch	2.5	4.9	3.5	3.0	0.4	0.7	3.8	0.3
Real Consumption	4420.5	4458.7	4489.4	4524.0	4534.8	4569.9	4597.3	4609.4
% Ch	2.8	3.5	2.8	3.1	1.0	3.1	2.4	1.1
Real Nonresidential Fixed Investment	628.5	639.5	660.5	679.7	704.4	710.5	719.0	723.3
% Ch	7.3	7.1	13.8	12.2	15.4	3.5	4.9	2.5
Real Residential Fixed Investment	263.6	271.6	270.3	270.3	265.9	256.5	262.2	266.3
% Ch	12.8	12.7	-1.8	-0.1	-6.3	-13.4	9.2	6.4
Real Personal Income	5343.3	5481.5	5505.4	5563.3	5627.5	5650.6	5702.1	5756.7
% Ch	-5.6	10.7	1.8	4.3	4.7	1.7	3.7	3.9
Real Per Capita Income (\$/Person)	20,546	21,025	21,065	21,234	21,427	21,464	21,608	21,763
% Ch	-6.5	9.7	0.8	3.3	3.7	0.7	2.7	2.9
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator (Chain-Wt.,1992=1.0)	1.041	1.047	1.055	1.061	1.067	1.075	1.078	1.083
% Ch	2.3	2.3	3.1	2.3	2.3	3.0	1.1	1.9
U.S. Consumer Price Index (1982-84=1.0)	1.467	1.477	1.490	1.499	1.509	1.522	1.530	1.539
% Ch	2.0	2.6	3.8	2.3	2.9	3.4	2.0	2.4
Employment Cost Index (June 1989=1.0)	1.172	1.181	1.190	1.197	1.206	1.215	1.224	1.232
% Ch	2.4	3.1	3.1	2.4	3.0	3.0	3.0	2.6
<b>Current Dollar National Income (Billions of Dollars)</b>								
Gross Domestic Product	6776.0	6890.5	6993.1	7083.2	7149.8	7204.9	7309.8	7350.6
% Ch	5.3	6.9	6.1	5.3	3.8	3.1	6.0	2.3
Personal Income	5562.4	5739.1	5808.2	5902.7	6004.5	6074.4	6146.9	6234.5
% Ch	-3.4	13.3	4.9	6.7	7.1	4.7	4.9	5.8
<b>Employment (Millions)</b>								
U.S. Civilian Labor Force	130.6	130.7	131.1	131.8	132.2	132.2	132.3	132.5
Total U.S. Employment	122.0	122.6	123.2	124.4	124.9	124.7	124.8	125.1
Unemployment Rate (%)	6.60	6.17	6.03	5.60	5.50	5.63	5.70	5.57
Wage and Salary Employment	112.62	113.69	114.69	115.61	116.48	116.96	117.44	117.93
% Ch	2.9	3.8	3.6	3.3	3.1	1.6	1.7	1.7
Manufacturing	18.17	18.27	18.37	18.47	18.55	18.52	18.43	18.37
% Ch	1.6	2.2	2.3	2.2	1.7	-0.7	-1.9	-1.5
Durable Manufacturing	10.32	10.40	10.49	10.58	10.65	10.67	10.65	10.64
% Ch	2.8	3.3	3.4	3.5	2.9	0.5	-0.7	-0.3
Nondurable Manufacturing	7.85	7.87	7.88	7.90	7.90	7.86	7.78	7.72
% Ch	0.1	0.8	0.9	0.5	0.2	-2.2	-3.6	-3.1
Nonmanufacturing	94.46	95.42	96.32	97.14	97.93	98.43	99.01	99.56
% Ch	3.1	4.1	3.8	3.5	3.3	2.1	2.4	2.3
Services	30.91	31.36	31.81	32.21	32.64	32.95	33.25	33.56
% Ch	3.6	5.9	5.9	5.2	5.5	3.8	3.7	3.7
<b>Miscellaneous Indicators</b>								
Credit Outstanding/Disp. Income	17.7	17.9	18.4	19.2	18.9	19.5	20.2	20.9
Auto Sales (Millions)	9.0	8.9	9.0	9.0	8.7	8.5	8.9	8.7
% Ch	6.1	-4.0	3.0	-1.6	-10.8	-9.7	21.7	-11.1
Housing Starts (Millions)	1.380	1.466	1.456	1.482	1.311	1.293	1.417	1.411
% Ch	-14.1	27.3	-2.8	7.3	-38.8	-5.4	44.4	-1.7
Federal Budget Surplus (Billions)	-212.7	-169.6	-188.5	-190.1	-172.6	-161.1	-158.5	-154.5
Net Exports (Billions)	-78.8	-93.0	-107.0	-98.7	-108.7	-115.3	-87.6	-67.2
3-Month Treasury Bill Rate (%)	3.24	3.99	4.48	5.28	5.74	5.60	5.37	5.26
30-Year U.S. Govt. Bond Rate (%)	6.56	7.36	7.59	7.96	7.64	6.96	6.71	6.23
Mortgage Rate (%)	7.30	8.44	8.59	9.10	8.81	7.95	7.70	7.35

Table A1.2  
**U.S. Economic Forecast Summary**  
 Forecast 1997 to 1999

	1996:1	1996:2	1996:3	1996:4	1997:1	1997:2	1997:3	1997:4
<b>Real National Income Accounts (Billions of 1992 Chained Dollars)</b>								
Real Gross Domestic Product	6814.3	6892.6	6928.4	7008.7	7052.2	7092.4	7124.1	7165.2
% Ch	2.0	4.7	2.1	4.7	2.5	2.3	1.8	2.3
Real Consumption	4649.1	4687.6	4693.5	4732.3	4779.2	4816.7	4851.8	4885.5
% Ch	3.5	3.4	0.5	3.4	4.0	3.2	2.9	2.8
Real Nonresidential Fixed Investment	743.5	750.5	781.4	789.4	802.7	812.2	824.3	833.6
% Ch	11.6	3.8	17.5	4.2	6.9	4.9	6.1	4.6
Real Residential Fixed Investment	271.1	281.5	277.8	276.9	275.3	278.9	281.6	283.2
% Ch	7.4	16.3	-5.2	-1.3	-2.3	5.2	3.9	2.3
Real Personal Income	5792.9	5850.7	5905.0	5946.6	6006.9	6044.4	6081.0	6114.6
% Ch	2.5	4.1	3.8	2.8	4.1	2.5	2.4	2.2
Real Per Capita Income (\$/Person)	21,848	22,015	22,168	22,272	22,447	22,536	22,621	22,696
% Ch	1.6	3.1	2.8	1.9	3.2	1.6	1.5	1.3
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator (Chain-Wt.,1992=1.0)	1.089	1.096	1.101	1.108	1.113	1.119	1.126	1.133
% Ch	2.2	2.6	1.8	2.6	1.7	2.4	2.3	2.5
U.S. Consumer Price Index (1982-84=1.0)	1.551	1.566	1.575	1.587	1.595	1.606	1.616	1.627
% Ch	3.2	3.8	2.3	3.2	2.2	2.8	2.5	2.6
Employment Cost Index (June 1989=1.0)	1.245	1.256	1.264	1.273	1.283	1.294	1.305	1.316
% Ch	4.3	3.6	2.6	2.9	3.3	3.3	3.4	3.5
<b>Current Dollar National Income (Billions of Dollars)</b>								
Gross Domestic Product	7426.8	7545.1	7616.3	7731.7	7818.0	7905.3	7985.7	8075.4
% Ch	4.2	6.5	3.8	6.2	4.5	4.5	4.1	4.6
Personal Income	6308.5	6412.4	6501.4	6588.8	6683.9	6765.5	6845.7	6926.5
% Ch	4.8	6.8	5.7	5.5	5.9	5.0	4.8	4.8
<b>Employment (Millions)</b>								
U.S. Civilian Labor Force	133.1	133.6	134.1	134.8	135.8	136.1	136.4	136.9
Total U.S. Employment	125.7	126.4	127.0	127.7	128.6	129.0	129.3	129.7
Unemployment Rate (%)	5.57	5.43	5.27	5.27	5.30	5.21	5.24	5.26
Wage and Salary Employment	118.47	119.26	119.96	120.52	121.16	121.80	122.41	122.82
% Ch	1.8	2.7	2.3	1.9	2.1	2.1	2.0	1.3
Manufacturing	18.31	18.29	18.27	18.26	18.27	18.24	18.21	18.15
% Ch	-1.3	-0.3	-0.6	-0.1	0.2	-0.8	-0.5	-1.3
Durable Manufacturing	10.64	10.68	10.69	10.70	10.72	10.68	10.64	10.58
% Ch	-0.0	1.3	0.5	0.3	0.9	-1.5	-1.4	-2.2
Nondurable Manufacturing	7.67	7.62	7.58	7.57	7.55	7.56	7.57	7.57
% Ch	-3.0	-2.4	-2.1	-0.5	-0.9	0.3	0.7	-0.0
Nonmanufacturing	100.16	100.97	101.69	102.25	102.89	103.57	104.20	104.66
% Ch	2.4	3.3	2.9	2.2	2.5	2.7	2.5	1.8
Services	33.88	34.26	34.53	34.79	35.13	35.46	35.80	36.08
% Ch	3.9	4.6	3.2	3.1	4.0	3.9	3.8	3.2
<b>Miscellaneous Indicators</b>								
Credit Outstanding/Disp. Income	20.5	20.8	21.0	21.1	21.2	21.3	21.3	21.4
Auto Sales (Millions)	8.6	8.7	8.7	8.0	8.4	8.2	8.1	8.1
% Ch	-1.5	4.2	-2.4	-26.5	22.4	-8.5	-5.5	-3.6
Housing Starts (Millions)	1.469	1.493	1.488	1.409	1.411	1.412	1.395	1.370
% Ch	17.3	6.8	-1.3	-19.5	0.4	0.3	-4.7	-6.9
Federal Budget Surplus (Billions)	-155.2	-126.7	-120.8	-99.9	-133.4	-127.6	-144.3	-145.7
Net Exports (Billions)	-86.3	-99.2	-120.2	-92.5	-107.7	-121.0	-134.2	-127.7
3-Month Treasury Bill Rate (%)	4.93	5.02	5.10	4.98	5.01	5.14	5.36	5.44
30-Year U.S. Govt. Bond Rate (%)	6.30	6.93	6.97	6.61	6.79	6.67	6.74	6.89
Mortgage Rate (%)	7.24	8.11	8.16	7.71	7.85	7.91	7.97	8.10

Table A1.2  
**U.S. Economic Forecast Summary**  
 Forecast 1997 to 1999

	1998:1	1998:2	1998:3	1998:4	1999:1	1999:2	1999:3	1999:4
<b>Real National Income Accounts (Billions of 1992 Chained Dollars)</b>								
Real Gross Domestic Product	7208.9	7245.6	7274.4	7310.6	7349.8	7390.0	7429.1	7471.7
% Ch	2.5	2.0	1.6	2.0	2.2	2.2	2.1	2.3
Real Consumption	4917.9	4944.0	4970.6	4999.9	5027.4	5049.4	5073.5	5100.2
% Ch	2.7	2.1	2.2	2.4	2.2	1.8	1.9	2.1
Real Nonresidential Fixed Investment	845.2	855.0	860.9	865.9	870.4	878.2	886.7	893.8
% Ch	5.7	4.7	2.8	2.3	2.1	3.6	3.9	3.3
Real Residential Fixed Investment	283.0	281.9	280.6	280.1	280.9	282.0	283.1	284.2
% Ch	-0.3	-1.6	-1.8	-0.8	1.2	1.5	1.7	1.6
Real Personal Income	6158.0	6185.2	6209.0	6234.9	6272.4	6299.2	6327.7	6355.3
% Ch	2.9	1.8	1.5	1.7	2.4	1.7	1.8	1.8
Real Per Capita Income (\$/Person)	22,806	22,856	22,893	22,939	23,026	23,075	23,130	23,181
% Ch	2.0	0.9	0.7	0.8	1.5	0.8	1.0	0.9
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator (Chain-Wt., 1992=1.0)	1.140	1.148	1.155	1.163	1.171	1.180	1.188	1.197
% Ch	2.6	2.7	2.7	2.7	2.9	2.9	2.9	2.9
U.S. Consumer Price Index (1982-84=1.0)	1.638	1.650	1.661	1.673	1.685	1.698	1.711	1.724
% Ch	2.8	2.8	2.8	2.8	3.0	3.1	3.1	3.1
Employment Cost Index (June 1989=1.0)	1.326	1.336	1.346	1.356	1.366	1.377	1.388	1.399
% Ch	3.1	3.1	3.1	3.0	3.0	3.2	3.1	3.2
<b>Current Dollar National Income (Billions of Dollars)</b>								
Gross Domestic Product	8174.8	8262.4	8342.4	8431.5	8534.6	8634.2	8734.7	8836.9
% Ch	5.0	4.4	3.9	4.3	5.0	4.8	4.7	4.8
Personal Income	7021.2	7098.7	7173.8	7252.2	7347.4	7432.0	7518.8	7605.7
% Ch	5.6	4.5	4.3	4.4	5.4	4.7	4.8	4.7
<b>Employment (Millions)</b>								
U.S. Civilian Labor Force	137.3	137.7	138.1	138.5	138.9	139.3	139.7	140.0
Total U.S. Employment	130.1	130.4	130.8	131.1	131.4	131.7	132.1	132.4
Unemployment Rate (%)	5.26	5.27	5.32	5.37	5.41	5.43	5.46	5.46
Wage and Salary Employment	123.32	123.83	124.23	124.62	125.01	125.35	125.72	126.07
% Ch	1.7	1.7	1.3	1.3	1.2	1.1	1.2	1.1
Manufacturing	18.11	18.11	18.10	18.08	18.05	18.04	18.02	18.00
% Ch	-0.9	-0.1	-0.1	-0.6	-0.5	-0.3	-0.3	-0.6
Durable Manufacturing	10.54	10.53	10.52	10.49	10.46	10.45	10.44	10.42
% Ch	-1.6	-0.5	-0.4	-1.2	-0.9	-0.5	-0.4	-0.7
Nondurable Manufacturing	7.57	7.58	7.59	7.59	7.59	7.59	7.59	7.58
% Ch	0.1	0.3	0.5	0.2	0.1	-0.1	-0.2	-0.4
Nonmanufacturing	105.21	105.73	106.12	106.55	106.96	107.31	107.69	108.07
% Ch	2.1	2.0	1.5	1.6	1.5	1.3	1.4	1.4
Services	36.34	36.62	36.88	37.14	37.37	37.60	37.80	38.01
% Ch	2.9	3.1	2.8	2.9	2.5	2.4	2.2	2.2
<b>Miscellaneous Indicators</b>								
Credit Outstanding/Disp. Income	21.4	21.3	21.3	21.3	21.3	21.3	21.3	21.3
Auto Sales (Millions)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
% Ch	-1.3	-0.3	0.2	-1.1	1.8	0.1	-0.6	-1.0
Housing Starts (Millions)	1.359	1.348	1.329	1.333	1.344	1.351	1.352	1.355
% Ch	-3.2	-3.2	-5.6	1.5	3.2	2.1	0.5	0.9
Federal Budget Surplus (Billions)	-142.0	-128.6	-128.1	-127.3	-126.0	-116.5	-114.8	-110.0
Net Exports (Billions)	-128.2	-132.0	-136.9	-127.7	-123.8	-123.7	-125.3	-115.2
3-Month Treasury Bill Rate (%)	5.43	5.44	5.32	5.22	5.23	5.22	5.22	5.11
30-Year U.S. Govt. Bond Rate (%)	7.02	7.10	7.07	7.01	6.98	6.97	6.96	6.90
Mortgage Rate (%)	8.23	8.32	8.31	8.24	8.21	8.19	8.18	8.13

Table A1.3  
**Washington Economic Forecast Summary**  
 Forecast 1997 to 1999

	1992	1993	1994	1995	1996	1997	1998	1999
<b>Real Income (Billions of 1992 Chained Dollars)</b>								
Real Personal Income	110.448	112.791	115.693	120.017	125.158	130.476	134.697	138.710
% Ch	4.4	2.1	2.6	3.7	4.3	4.2	3.2	3.0
Real Wage and Salary Disb.	62.911	62.940	64.346	66.544	70.078	73.462	75.926	78.205
% Ch	5.0	0.0	2.2	3.4	5.3	4.8	3.4	3.0
Real Nonwage Income	47.537	49.850	51.347	53.473	55.081	57.014	58.770	60.505
% Ch	3.6	4.9	3.0	4.1	3.0	3.5	3.1	3.0
Real Per Capita Income (\$/Person)	21,390	21,378	21,542	21,970	22,546	23,107	23,396	23,616
% Ch	2.0	-0.1	0.8	2.0	2.6	2.5	1.3	0.9
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator (Chain-Wt.,1992=1.0)	1.000	1.027	1.051	1.076	1.099	1.123	1.152	1.184
% Ch	3.3	2.7	2.4	2.4	2.1	2.2	2.6	2.8
Seattle Cons. Price Index (1982-84=1.0)	1.390	1.429	1.478	1.523	1.575	1.632	1.681	1.738
% Ch	3.7	2.8	3.4	3.0	3.4	3.6	3.0	3.4
Avg. Hourly Earnings-Mfg. (\$/Hour)	13.78	14.01	14.20	14.73	14.95	17.10	17.38	17.68
% Ch	3.3	1.7	1.4	3.7	1.5	14.4	1.7	1.7
<b>Current Dollar Income (Billions of Dollars)</b>								
Nonfarm Personal Income	109.512	114.626	120.959	128.543	136.566	145.673	154.291	163.390
% Ch	7.7	4.7	5.5	6.3	6.2	6.7	5.9	5.9
Personal Income	110.462	115.788	121.606	129.117	137.498	146.486	155.125	164.252
% Ch	7.9	4.8	5.0	6.2	6.5	6.5	5.9	5.9
Disposable Personal Income	96.811	101.211	106.145	112.345	119.091	127.264	135.061	143.010
% Ch	8.2	4.5	4.9	5.8	6.0	6.9	6.1	5.9
Per Capita Income (\$/Person)	21,391	21,945	22,643	23,636	24,768	25,941	26,944	27,964
% Ch	5.4	2.6	3.2	4.4	4.8	4.7	3.9	3.8
<b>Employment (Thousands)</b>								
Washington Civilian Labor Force	2648.2	2701.2	2707.2	2817.0	2887.0	2944.9	3016.6	3086.8
Total Washington Employment	2446.4	2495.3	2533.9	2637.2	2699.2	2765.9	2836.7	2899.8
Unemployment Rate (%)	7.61	7.62	6.40	6.38	6.51	6.08	5.96	6.06
Wage and Salary Employment	2221.9	2251.7	2304.1	2346.8	2411.5	2484.8	2552.2	2612.2
% Ch	2.0	1.3	2.3	1.9	2.8	3.0	2.7	2.4
Manufacturing	347.2	340.8	336.9	332.3	344.2	365.1	371.5	375.9
% Ch	-1.3	-1.8	-1.1	-1.4	3.6	6.1	1.8	1.2
Durable Manufacturing	245.6	237.4	230.6	223.8	234.9	254.7	259.1	261.5
% Ch	-2.4	-3.4	-2.9	-2.9	5.0	8.4	1.7	1.0
Aerospace	111.9	102.7	91.8	80.2	86.2	102.4	105.5	106.5
% Ch	-3.2	-8.2	-10.6	-12.7	7.6	18.8	3.0	0.9
Nondurable Manufacturing	101.6	103.4	106.3	108.5	109.3	110.4	112.5	114.3
% Ch	1.4	1.8	2.8	2.0	0.8	1.0	1.8	1.7
Nonmanufacturing	1874.7	1910.9	1967.2	2014.5	2067.3	2119.7	2180.6	2236.3
% Ch	2.7	1.9	2.9	2.4	2.6	2.5	2.9	2.6
Construction	119.2	119.1	123.0	122.0	126.7	129.3	130.3	130.7
% Ch	0.9	-0.1	3.3	-0.8	3.9	2.0	0.8	0.4
Services	557.8	576.7	598.0	623.3	649.3	672.2	699.9	724.8
% Ch	4.1	3.4	3.7	4.2	4.2	3.5	4.1	3.6
<b>Housing Indicators</b>								
Housing Units Authorized (Thousands)	39.682	41.342	44.034	38.160	42.400	43.638	43.479	44.452
% Ch	20.2	4.2	6.5	-13.3	11.1	2.9	-0.4	2.2
Mortgage Rate (%)	8.40	7.33	8.36	7.96	7.81	7.96	8.27	8.18

Table A1.4  
**Washington Economic Forecast Summary**  
 Forecast 1997 to 1999

	1994:1	1994:2	1994:3	1994:4	1995:1	1995:2	1995:3	1995:4
<b>Real Income (Billions of 1992 Chained Dollars)</b>								
Real Personal Income	112.684	116.146	116.074	117.867	118.033	119.336	120.862	121.837
% Ch	-6.3	12.9	-0.2	6.3	0.6	4.5	5.2	3.3
Real Wage and Salary Disb.	62.678	64.731	64.240	65.734	65.163	66.096	67.224	67.694
% Ch	-6.8	13.8	-3.0	9.6	-3.4	5.8	7.0	2.8
Real Nonwage Income	50.006	51.415	51.834	52.133	52.870	53.240	53.637	54.143
% Ch	-5.8	11.8	3.3	2.3	5.8	2.8	3.0	3.8
Real Per Capita Income (\$/Person)	21,124	21,676	21,566	21,803	21,738	21,890	22,082	22,172
% Ch	-8.0	10.9	-2.0	4.5	-1.2	2.8	3.6	1.6
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator (Chain-Wt.,1992=1.0)	1.041	1.047	1.055	1.061	1.067	1.075	1.078	1.083
% Ch	2.3	2.3	3.1	2.3	2.3	3.0	1.1	1.9
Seattle Cons. Price Index (1982-84=1.0)	1.457	1.471	1.487	1.497	1.506	1.518	1.527	1.539
% Ch	3.2	3.7	4.4	2.9	2.5	3.0	2.6	3.0
Avg. Hourly Earnings-Mfg. (\$/Hour)	14.04	14.09	14.21	14.46	14.88	14.99	15.06	13.98
% Ch	-3.1	1.4	3.4	7.1	12.4	3.0	1.8	-25.8
<b>Current Dollar Income (Billions of Dollars)</b>								
Nonfarm Personal Income	116.486	120.931	121.869	124.549	125.362	127.744	129.743	131.323
% Ch	-2.6	16.2	3.1	9.1	2.6	7.8	6.4	5.0
Personal Income	117.304	121.605	122.458	125.057	125.941	128.286	130.289	131.950
% Ch	-4.1	15.5	2.8	8.8	2.9	7.7	6.4	5.2
Disposable Personal Income	102.424	105.908	107.040	109.207	109.791	111.359	113.365	114.867
% Ch	-4.0	14.3	4.3	8.4	2.2	5.8	7.4	5.4
Per Capita Income (\$/Person)	21,990	22,695	22,753	23,133	23,194	23,532	23,804	24,012
% Ch	-5.8	13.4	1.0	6.9	1.1	6.0	4.7	3.5
<b>Employment (Thousands)</b>								
Washington Civilian Labor Force	2703.3	2690.4	2704.6	2730.3	2779.0	2811.2	2829.9	2848.1
Total Washington Employment	2521.5	2514.6	2538.2	2561.4	2606.2	2634.6	2647.7	2660.5
Unemployment Rate (%)	6.73	6.53	6.15	6.19	6.22	6.28	6.44	6.59
Wage and Salary Employment	2282.5	2293.9	2313.0	2327.1	2339.6	2346.2	2352.9	2348.5
% Ch	1.6	2.0	3.4	2.5	2.2	1.1	1.2	-0.8
Manufacturing	336.2	335.7	337.0	338.7	339.1	336.8	333.6	319.8
% Ch	-2.1	-0.5	1.5	2.0	0.5	-2.7	-3.7	-15.5
Durable Manufacturing	231.0	229.6	230.3	231.4	231.5	228.7	225.1	210.0
% Ch	-4.1	-2.5	1.2	2.0	0.1	-4.7	-6.1	-24.2
Aerospace	94.3	91.7	90.9	90.4	88.9	85.8	80.8	65.2
% Ch	-14.1	-10.7	-3.2	-2.2	-6.7	-13.3	-21.4	-57.7
Nondurable Manufacturing	105.2	106.2	106.7	107.3	107.6	108.1	108.5	109.8
% Ch	2.7	3.9	2.1	2.0	1.2	2.0	1.5	5.0
Nonmanufacturing	1946.3	1958.2	1976.0	1988.4	2000.6	2009.4	2019.3	2028.7
% Ch	2.3	2.5	3.7	2.5	2.5	1.8	2.0	1.9
Construction	122.7	123.3	123.5	122.6	122.1	122.4	122.0	121.4
% Ch	-0.8	2.2	0.5	-2.9	-1.4	0.7	-1.1	-2.0
Services	587.8	593.6	603.1	607.6	612.7	619.6	627.6	633.5
% Ch	2.4	3.9	6.6	3.0	3.4	4.5	5.3	3.9
<b>Housing Indicators</b>								
Housing Units Authorized (Thousands)	44.099	43.542	45.484	43.011	37.356	40.162	33.927	41.196
% Ch	-28.4	-5.0	19.1	-20.0	-43.1	33.6	-49.1	117.4
Mortgage Rate (%)	7.30	8.44	8.59	9.10	8.81	7.95	7.70	7.35



Table A1.4  
**Washington Economic Forecast Summary**  
 Forecast 1997 to 1999

	1996:1	1996:2	1996:3	1996:4	1997:1	1997:2	1997:3	1997:4
<b>Real Income (Billions of 1992 Chained Dollars)</b>								
Real Personal Income	122.869	124.470	126.140	127.155	128.793	129.940	131.025	132.147
% Ch	3.4	5.3	5.5	3.3	5.3	3.6	3.4	3.5
Real Wage and Salary Disb.	68.374	69.555	70.781	71.600	72.447	73.155	73.780	74.468
% Ch	4.1	7.1	7.2	4.7	4.8	4.0	3.5	3.8
Real Nonwage Income	54.495	54.915	55.359	55.555	56.346	56.784	57.245	57.679
% Ch	2.6	3.1	3.3	1.4	5.8	3.1	3.3	3.1
Real Per Capita Income (\$/Person)	22,272	22,469	22,677	22,766	22,965	23,068	23,153	23,241
% Ch	1.8	3.6	3.8	1.6	3.5	1.8	1.5	1.5
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator (Chain-Wt.,1992=1.0)	1.089	1.096	1.101	1.108	1.113	1.119	1.126	1.133
% Ch	2.2	2.6	1.8	2.6	1.7	2.4	2.3	2.5
Seattle Cons. Price Index (1982-84=1.0)	1.549	1.563	1.582	1.606	1.615	1.627	1.638	1.649
% Ch	2.8	3.4	5.2	6.0	2.4	3.0	2.6	2.9
Avg. Hourly Earnings-Mfg. (\$/Hour)	14.43	14.10	14.19	17.08	16.99	17.06	17.13	17.21
% Ch	13.5	-8.8	2.6	109.5	-2.0	1.7	1.7	1.8
<b>Current Dollar Income (Billions of Dollars)</b>								
Nonfarm Personal Income	133.027	135.465	137.749	140.023	142.496	144.630	146.687	148.877
% Ch	5.3	7.5	6.9	6.8	7.3	6.1	5.8	6.1
Personal Income	133.804	136.419	138.880	140.888	143.307	145.442	147.502	149.693
% Ch	5.7	8.0	7.4	5.9	7.0	6.1	5.8	6.1
Disposable Personal Income	116.307	117.897	120.242	121.917	124.293	126.104	128.354	130.303
% Ch	5.1	5.6	8.2	5.7	8.0	6.0	7.3	6.2
Per Capita Income (\$/Person)	24,254	24,626	24,967	25,225	25,554	25,820	26,065	26,326
% Ch	4.1	6.3	5.7	4.2	5.3	4.2	3.9	4.1
<b>Employment (Thousands)</b>								
Washington Civilian Labor Force	2861.4	2881.2	2897.3	2908.2	2917.8	2936.0	2954.3	2971.6
Total Washington Employment	2675.5	2690.1	2709.2	2722.1	2736.1	2756.8	2776.7	2793.9
Unemployment Rate (%)	6.50	6.63	6.49	6.40	6.23	6.10	6.01	5.98
Wage and Salary Employment	2384.2	2398.9	2424.7	2438.4	2456.5	2476.1	2495.1	2511.5
% Ch	6.2	2.5	4.4	2.3	3.0	3.2	3.1	2.6
Manufacturing	337.6	338.4	346.0	355.0	361.1	364.0	366.8	368.7
% Ch	24.1	0.9	9.4	10.8	7.1	3.3	3.1	2.1
Durable Manufacturing	227.2	228.3	237.9	246.3	251.6	253.8	256.0	257.4
% Ch	37.0	1.8	18.0	14.9	8.9	3.5	3.5	2.3
Aerospace	80.3	81.4	88.1	95.0	99.4	102.0	103.6	104.6
% Ch	131.0	5.3	37.6	35.1	19.8	10.7	6.7	3.9
Nondurable Manufacturing	110.4	110.1	108.1	108.7	109.5	110.2	110.8	111.3
% Ch	2.0	-0.9	-7.0	2.0	3.0	2.6	2.2	1.6
Nonmanufacturing	2046.6	2060.6	2078.7	2083.4	2095.4	2112.1	2128.3	2142.8
% Ch	3.6	2.8	3.6	0.9	2.3	3.2	3.1	2.7
Construction	124.4	126.3	128.4	127.8	128.5	128.9	129.5	130.1
% Ch	10.2	6.2	6.9	-1.7	2.3	1.1	2.0	1.8
Services	640.2	647.7	653.2	656.1	660.9	668.5	676.3	683.2
% Ch	4.3	4.7	3.5	1.8	2.9	4.7	4.7	4.1
<b>Housing Indicators</b>								
Housing Units Authorized (Thousands)	45.585	42.774	40.799	40.440	42.413	44.698	43.846	43.596
% Ch	49.9	-22.5	-17.2	-3.5	21.0	23.4	-7.4	-2.3
Mortgage Rate (%)	7.24	8.11	8.16	7.71	7.85	7.91	7.97	8.10

Table A1.4  
**Washington Economic Forecast Summary**  
 Forecast 1997 to 1999

	1998:1	1998:2	1998:3	1998:4	1999:1	1999:2	1999:3	1999:4
<b>Real Income (Billions of 1992 Chained Dollars)</b>								
Real Personal Income	133.371	134.255	135.119	136.043	137.188	138.174	139.214	140.265
% Ch	3.8	2.7	2.6	2.8	3.4	2.9	3.0	3.1
Real Wage and Salary Disb.	75.107	75.656	76.204	76.738	77.361	77.917	78.477	79.065
% Ch	3.5	3.0	2.9	2.8	3.3	2.9	2.9	3.0
Real Nonwage Income	58.264	58.598	58.914	59.305	59.827	60.256	60.738	61.200
% Ch	4.1	2.3	2.2	2.7	3.6	2.9	3.2	3.1
Real Per Capita Income (\$/Person)	23,341	23,379	23,412	23,454	23,534	23,585	23,644	23,704
% Ch	1.7	0.7	0.6	0.7	1.4	0.9	1.0	1.0
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator (Chain-Wt.,1992=1.0)	1.140	1.148	1.155	1.163	1.171	1.180	1.188	1.197
% Ch	2.6	2.7	2.7	2.7	2.9	2.9	2.9	2.9
Seattle Cons. Price Index (1982-84=1.0)	1.662	1.675	1.688	1.701	1.716	1.731	1.745	1.761
% Ch	3.1	3.1	3.2	3.2	3.4	3.5	3.5	3.5
Avg. Hourly Earnings-Mfg. (\$/Hour)	17.27	17.35	17.42	17.49	17.56	17.64	17.72	17.80
% Ch	1.6	1.7	1.7	1.7	1.7	1.8	1.8	1.8
<b>Current Dollar Income (Billions of Dollars)</b>								
Nonfarm Personal Income	151.241	153.251	155.276	157.396	159.849	162.165	164.556	166.991
% Ch	6.5	5.4	5.4	5.6	6.4	5.9	6.0	6.1
Personal Income	152.066	154.083	156.113	158.240	160.700	163.023	165.421	167.863
% Ch	6.5	5.4	5.4	5.6	6.4	5.9	6.0	6.0
Disposable Personal Income	132.477	134.070	135.934	137.763	139.988	141.876	144.039	146.136
% Ch	6.8	4.9	5.7	5.5	6.6	5.5	6.2	6.0
Per Capita Income (\$/Person)	26,613	26,832	27,049	27,281	27,567	27,826	28,095	28,367
% Ch	4.4	3.3	3.3	3.5	4.3	3.8	3.9	3.9
<b>Employment (Thousands)</b>								
Washington Civilian Labor Force	2989.8	3007.9	3025.4	3043.3	3061.3	3078.1	3095.4	3112.7
Total Washington Employment	2812.4	2829.1	2844.5	2860.7	2876.8	2891.7	2907.5	2923.1
Unemployment Rate (%)	5.94	5.94	5.98	6.00	6.02	6.06	6.07	6.09
Wage and Salary Employment	2529.0	2545.0	2559.7	2575.0	2590.4	2604.5	2619.5	2634.4
% Ch	2.8	2.6	2.3	2.4	2.4	2.2	2.3	2.3
Manufacturing	370.1	371.1	372.1	373.0	374.1	375.2	376.5	377.8
% Ch	1.5	1.1	1.1	1.0	1.2	1.2	1.4	1.4
Durable Manufacturing	258.3	258.8	259.4	259.8	260.4	261.1	261.9	262.8
% Ch	1.4	0.8	0.8	0.6	0.9	1.1	1.3	1.3
Aerospace	105.1	105.4	105.6	105.9	106.1	106.4	106.6	106.9
% Ch	1.9	1.0	1.0	1.0	0.9	0.9	0.9	0.9
Nondurable Manufacturing	111.8	112.2	112.7	113.2	113.7	114.1	114.6	115.0
% Ch	1.9	1.6	1.6	1.8	1.9	1.5	1.6	1.5
Nonmanufacturing	2159.0	2173.9	2187.6	2202.1	2216.3	2229.3	2243.0	2256.6
% Ch	3.0	2.8	2.5	2.7	2.6	2.4	2.5	2.5
Construction	130.4	130.3	130.2	130.2	130.3	130.5	130.9	131.2
% Ch	0.9	-0.4	-0.1	-0.1	0.2	0.8	1.0	1.2
Services	689.7	696.6	703.2	710.0	716.0	722.1	727.7	733.5
% Ch	3.9	4.1	3.8	3.9	3.4	3.4	3.2	3.2
<b>Housing Indicators</b>								
Housing Units Authorized (Thousands)	43.276	43.179	43.479	43.980	44.226	44.371	44.434	44.775
% Ch	-2.9	-0.9	2.8	4.7	2.3	1.3	0.6	3.1
Mortgage Rate (%)	8.23	8.32	8.31	8.24	8.21	8.19	8.18	8.13

Table A2.1

**U.S. Nonagricultural Employment by Industry**

Forecast 1997 to 1999

	1992	1993	1994	1995	1996	1997	1998	1999
Wage and Salary Employment	108.59	110.73	114.15	117.20	119.55	122.05	124.00	125.54
% Ch	0.3	2.0	3.1	2.7	2.0	2.1	1.6	1.2
Manufacturing	18.11	18.08	18.32	18.47	18.28	18.22	18.10	18.03
% Ch	-1.6	-0.2	1.4	0.8	-1.0	-0.4	-0.7	-0.4
Nondurable Manufacturing	7.83	7.85	7.87	7.82	7.61	7.56	7.58	7.59
% Ch	-0.1	0.4	0.3	-0.7	-2.7	-0.6	0.2	0.1
Food and Kindred Products	1.66	1.68	1.68	1.68	1.66	1.65	1.65	1.66
% Ch	-0.3	1.0	-0.1	0.1	-1.5	-0.1	0.0	0.1
Pulp and Paper	0.69	0.69	0.69	0.69	0.68	0.68	0.68	0.69
% Ch	0.4	0.2	0.1	-0.1	-2.2	0.2	1.0	0.7
Apparel	1.01	0.99	0.97	0.93	0.85	0.80	0.80	0.80
% Ch	0.1	-1.8	-1.4	-4.5	-9.0	-5.1	-0.7	0.3
Printing	1.51	1.52	1.54	1.54	1.53	1.53	1.55	1.55
% Ch	-1.9	0.7	1.3	0.4	-0.9	0.4	0.8	0.3
Chemicals	1.08	1.08	1.06	1.03	1.02	1.02	1.02	1.01
% Ch	0.7	-0.3	-2.2	-2.1	-1.3	-0.3	0.1	-0.6
Other Nondurables	1.88	1.90	1.94	1.93	1.88	1.87	1.88	1.88
% Ch	0.7	1.1	2.0	-0.0	-2.9	-0.3	0.2	-0.1
Durable Manufacturing	10.28	10.22	10.45	10.65	10.68	10.66	10.52	10.44
% Ch	-2.7	-0.5	2.2	2.0	0.2	-0.2	-1.3	-0.7
Lumber and Wood	0.68	0.71	0.75	0.76	0.76	0.77	0.77	0.76
% Ch	0.7	4.3	6.3	1.4	-0.2	0.6	-0.0	-0.9
Furniture	0.48	0.49	0.50	0.51	0.50	0.50	0.51	0.50
% Ch	0.6	2.0	3.7	0.8	-1.7	0.5	0.5	-1.0
Stone-Clay-Glass	0.51	0.52	0.53	0.54	0.54	0.53	0.53	0.52
% Ch	-1.5	0.7	2.9	1.1	-0.4	-0.8	-0.3	-1.5
Primary Metals	0.70	0.68	0.70	0.71	0.70	0.70	0.70	0.69
% Ch	-3.8	-1.7	2.1	1.8	-0.8	-1.0	-0.4	-0.2
Fabricated Metals	1.33	1.34	1.39	1.44	1.45	1.46	1.46	1.46
% Ch	-1.9	0.7	3.7	3.6	0.9	1.0	-0.2	-0.1
Nonelectrical Machinery	1.93	1.93	1.99	2.06	2.09	2.08	2.05	2.03
% Ch	-3.5	0.1	3.0	3.5	1.4	-0.2	-1.6	-0.7
Electrical Machinery	1.53	1.53	1.57	1.62	1.65	1.62	1.56	1.54
% Ch	-4.0	-0.2	2.9	3.4	1.6	-1.8	-3.9	-1.2
Transportation Equipment	1.83	1.76	1.76	1.78	1.77	1.78	1.77	1.77
% Ch	-3.2	-4.0	0.2	1.3	-1.0	0.9	-0.6	-0.1
Instruments	0.93	0.90	0.86	0.84	0.83	0.82	0.80	0.78
% Ch	-4.7	-3.6	-3.9	-2.8	-0.5	-1.1	-2.4	-2.5
Other Durables	0.37	0.38	0.39	0.39	0.39	0.38	0.38	0.38
% Ch	0.6	2.9	2.8	0.1	-0.9	-0.8	-1.1	0.5
Nonmanufacturing	90.49	92.65	95.83	98.73	101.27	103.83	105.90	107.51
% Ch	0.7	2.4	3.4	3.0	2.6	2.5	2.0	1.5
Mining	0.63	0.61	0.60	0.58	0.57	0.57	0.55	0.54
% Ch	-8.0	-4.0	-1.5	-3.4	-1.6	-0.7	-2.4	-1.4
Construction	4.49	4.66	4.98	5.16	5.40	5.61	5.65	5.62
% Ch	-3.5	3.8	6.8	3.6	4.7	3.7	0.8	-0.5
Trans., Comm. and Utilities	5.72	5.83	5.99	6.17	6.32	6.39	6.46	6.48
% Ch	-0.7	1.9	2.8	2.9	2.4	1.2	1.0	0.3
Wholesale Trade	6.00	5.98	6.16	6.41	6.59	6.73	6.88	6.99
% Ch	-1.4	-0.3	3.0	4.0	2.7	2.2	2.3	1.5
Retail Trade	19.35	19.78	20.51	21.17	21.59	22.17	22.58	22.86
% Ch	0.4	2.2	3.7	3.3	2.0	2.7	1.8	1.3
Finance-Insurance-Real Estate	6.60	6.76	6.89	6.83	6.98	7.11	7.16	7.19
% Ch	-0.7	2.3	2.0	-0.9	2.1	1.9	0.8	0.4
Services	29.05	30.19	31.57	33.10	34.36	35.62	36.75	37.69
% Ch	2.5	3.9	4.6	4.8	3.8	3.6	3.2	2.6
State and Local Government	15.67	15.92	16.25	16.49	16.71	16.93	17.21	17.50
% Ch	1.5	1.6	2.0	1.5	1.3	1.4	1.6	1.7
Federal Government	2.97	2.91	2.87	2.82	2.76	2.70	2.66	2.63
% Ch	0.0	-1.8	-1.5	-1.7	-2.3	-1.9	-1.5	-1.1

Table A2.2

**U.S. Nonagricultural Employment by Industry**

Forecast 1997 to 1999

	1994:1	1994:2	1994:3	1994:4	1995:1	1995:2	1995:3	1995:4
Wage and Salary Employment	112.62	113.69	114.69	115.61	116.48	116.96	117.44	117.93
% Ch	2.9	3.8	3.6	3.3	3.1	1.6	1.7	1.7
Manufacturing	18.17	18.27	18.37	18.47	18.55	18.52	18.43	18.37
% Ch	1.6	2.2	2.3	2.2	1.7	-0.7	-1.9	-1.5
Nondurable Manufacturing	7.85	7.87	7.88	7.90	7.90	7.86	7.78	7.72
% Ch	0.1	0.8	0.9	0.5	0.2	-2.2	-3.6	-3.1
Food and Kindred Products	1.68	1.68	1.68	1.68	1.69	1.68	1.68	1.68
% Ch	-0.8	-0.6	-0.2	-0.1	2.2	-0.5	-1.7	-0.5
Pulp and Paper	0.69	0.69	0.69	0.69	0.70	0.69	0.69	0.69
% Ch	0.8	0.0	0.4	1.6	0.4	-0.8	-1.5	-2.9
Apparel	0.97	0.97	0.98	0.98	0.96	0.95	0.92	0.89
% Ch	-2.2	1.8	1.8	-1.0	-4.8	-7.4	-9.8	-12.5
Printing	1.53	1.53	1.54	1.54	1.55	1.54	1.54	1.54
% Ch	1.9	1.3	1.3	1.0	1.0	-0.7	-0.9	-1.1
Chemicals	1.07	1.06	1.05	1.05	1.04	1.04	1.03	1.03
% Ch	-2.9	-2.6	-2.6	-2.5	-1.8	-2.0	-2.0	-1.0
Other Nondurables	1.91	1.93	1.94	1.96	1.96	1.95	1.92	1.91
% Ch	2.2	3.2	3.2	2.8	1.4	-3.0	-5.6	-3.3
Durable Manufacturing	10.32	10.40	10.49	10.58	10.65	10.67	10.65	10.64
% Ch	2.8	3.3	3.4	3.5	2.9	0.5	-0.7	-0.3
Lumber and Wood	0.74	0.75	0.76	0.77	0.77	0.76	0.76	0.76
% Ch	7.4	7.2	6.2	3.2	1.7	-3.2	-2.1	0.9
Furniture	0.50	0.50	0.51	0.51	0.52	0.51	0.51	0.50
% Ch	3.9	5.2	5.7	2.1	2.9	-3.8	-4.4	-0.3
Stone-Clay-Glass	0.53	0.53	0.53	0.54	0.54	0.54	0.54	0.54
% Ch	3.6	3.9	2.3	3.0	2.5	-1.0	-2.4	-1.0
Primary Metals	0.69	0.69	0.70	0.71	0.71	0.71	0.71	0.71
% Ch	3.0	1.4	5.3	4.6	1.7	0.6	-2.8	0.8
Fabricated Metals	1.36	1.38	1.40	1.42	1.43	1.44	1.44	1.44
% Ch	3.7	5.1	5.3	5.5	5.4	1.7	-0.7	0.8
Nonelectrical Machinery	1.96	1.99	2.00	2.01	2.04	2.05	2.07	2.08
% Ch	3.8	5.0	2.4	3.7	4.5	3.4	2.1	2.8
Electrical Machinery	1.54	1.56	1.58	1.59	1.61	1.62	1.63	1.64
% Ch	3.1	4.9	4.5	3.7	3.9	2.5	2.1	3.1
Transportation Equipment	1.74	1.75	1.76	1.79	1.80	1.80	1.79	1.75
% Ch	1.3	1.1	3.7	5.7	2.7	-0.6	-2.6	-7.6
Instruments	0.88	0.86	0.86	0.85	0.84	0.84	0.84	0.83
% Ch	-3.3	-4.6	-4.2	-2.8	-3.1	-2.2	-1.1	-2.2
Other Durables	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
% Ch	3.9	2.8	4.2	-0.3	0.0	-1.4	-2.4	1.4
Nonmanufacturing	94.46	95.42	96.32	97.14	97.93	98.43	99.01	99.56
% Ch	3.1	4.1	3.8	3.5	3.3	2.1	2.4	2.3
Mining	0.61	0.60	0.60	0.59	0.59	0.58	0.58	0.57
% Ch	2.0	-6.2	-0.9	-2.0	-3.5	-4.7	-4.3	-3.7
Construction	4.85	4.97	5.02	5.09	5.13	5.13	5.17	5.21
% Ch	6.2	10.1	4.1	5.3	3.8	-0.3	2.8	3.6
Trans., Comm. and Utilities	5.92	5.96	6.02	6.06	6.11	6.14	6.18	6.23
% Ch	2.7	2.5	4.3	2.7	3.2	2.0	2.5	3.3
Wholesale Trade	6.07	6.13	6.19	6.26	6.34	6.39	6.44	6.48
% Ch	3.2	3.8	4.1	4.7	4.9	3.4	3.0	2.6
Retail Trade	20.17	20.40	20.61	20.84	21.04	21.14	21.23	21.30
% Ch	3.3	4.5	4.1	4.7	3.8	1.9	1.7	1.4
Finance-Insurance-Real Estate	6.91	6.92	6.90	6.85	6.81	6.81	6.83	6.87
% Ch	3.1	0.6	-1.2	-2.5	-2.2	-0.4	1.4	2.4
Services	30.91	31.36	31.81	32.21	32.64	32.95	33.25	33.56
% Ch	3.6	5.9	5.9	5.2	5.5	3.8	3.7	3.7
State and Local Government	16.11	16.21	16.31	16.37	16.43	16.46	16.52	16.55
% Ch	1.8	2.6	2.5	1.4	1.4	0.9	1.4	0.7
Federal Government	2.90	2.87	2.86	2.85	2.84	2.83	2.82	2.80
% Ch	-0.6	-3.1	-1.8	-0.9	-2.3	-0.8	-1.5	-3.4

Table A2.2

**U.S. Nonagricultural Employment by Industry**

Forecast 1997 to 1999

	1996:1	1996:2	1996:3	1996:4	1997:1	1997:2	1997:3	1997:4
Wage and Salary Employment	118.47	119.26	119.96	120.52	121.16	121.80	122.41	122.82
% Ch	1.8	2.7	2.3	1.9	2.1	2.1	2.0	1.3
Manufacturing	18.31	18.29	18.27	18.26	18.27	18.24	18.21	18.15
% Ch	-1.3	-0.3	-0.6	-0.1	0.2	-0.8	-0.5	-1.3
Nondurable Manufacturing	7.67	7.62	7.58	7.57	7.55	7.56	7.57	7.57
% Ch	-3.0	-2.4	-2.1	-0.5	-0.9	0.3	0.7	-0.0
Food and Kindred Products	1.67	1.66	1.64	1.65	1.65	1.65	1.66	1.65
% Ch	-0.3	-3.4	-4.7	1.6	1.0	0.9	0.4	-0.6
Pulp and Paper	0.68	0.68	0.67	0.67	0.68	0.68	0.68	0.68
% Ch	-2.3	-2.9	-2.5	1.0	0.8	0.3	1.6	1.0
Apparel	0.87	0.85	0.84	0.83	0.81	0.81	0.80	0.80
% Ch	-10.3	-6.7	-5.7	-5.4	-9.2	-1.5	-1.5	-2.3
Printing	1.53	1.53	1.53	1.53	1.53	1.53	1.54	1.54
% Ch	-1.3	-1.2	0.0	-0.3	0.6	0.8	1.6	1.0
Chemicals	1.03	1.02	1.02	1.02	1.02	1.02	1.02	1.02
% Ch	-1.0	-1.3	-1.4	-1.0	-0.1	0.3	1.0	0.4
Other Nondurables	1.88	1.88	1.88	1.88	1.87	1.87	1.88	1.88
% Ch	-4.4	-1.1	-0.1	-0.6	-0.8	0.0	0.7	-0.0
Durable Manufacturing	10.64	10.68	10.69	10.70	10.72	10.68	10.64	10.58
% Ch	-0.0	1.3	0.5	0.3	0.9	-1.5	-1.4	-2.2
Lumber and Wood	0.75	0.76	0.77	0.77	0.77	0.77	0.77	0.77
% Ch	-4.5	5.2	1.6	2.1	-1.8	0.5	0.3	0.9
Furniture	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.51
% Ch	-2.4	-1.8	0.3	0.8	-1.4	2.4	2.5	0.7
Stone-Clay-Glass	0.53	0.54	0.54	0.54	0.53	0.53	0.53	0.53
% Ch	-0.2	0.8	0.2	1.5	-3.7	-1.8	0.8	0.6
Primary Metals	0.71	0.71	0.70	0.70	0.70	0.70	0.70	0.70
% Ch	-0.8	-1.1	-0.9	-0.9	-0.8	-1.8	0.0	-1.5
Fabricated Metals	1.44	1.44	1.46	1.46	1.46	1.47	1.47	1.46
% Ch	0.6	0.5	3.2	1.4	0.9	0.5	-0.1	-0.6
Nonelectrical Machinery	2.09	2.09	2.09	2.09	2.10	2.09	2.08	2.06
% Ch	1.1	0.4	-0.1	0.4	2.7	-2.6	-2.7	-2.6
Electrical Machinery	1.65	1.65	1.65	1.65	1.64	1.63	1.62	1.59
% Ch	2.2	0.3	0.5	-1.5	-1.1	-1.8	-4.3	-6.2
Transportation Equipment	1.75	1.77	1.77	1.77	1.79	1.78	1.78	1.77
% Ch	-0.8	5.4	0.2	0.2	4.5	-1.5	-0.8	-2.5
Instruments	0.83	0.83	0.83	0.83	0.83	0.82	0.82	0.82
% Ch	0.2	1.1	-0.8	0.0	-1.0	-2.7	-1.4	-2.3
Other Durables	0.39	0.39	0.38	0.39	0.39	0.38	0.38	0.38
% Ch	-0.7	-2.4	-1.4	0.7	4.9	-6.5	-3.4	-1.3
Nonmanufacturing	100.16	100.97	101.69	102.25	102.89	103.57	104.20	104.66
% Ch	2.4	3.3	2.9	2.2	2.5	2.7	2.5	1.8
Mining	0.57	0.57	0.57	0.57	0.56	0.57	0.57	0.56
% Ch	0.9	1.9	-3.9	-2.6	-1.6	4.3	-0.4	-3.3
Construction	5.31	5.38	5.44	5.49	5.55	5.59	5.63	5.65
% Ch	7.6	5.5	4.4	4.0	4.5	2.8	2.9	1.4
Trans., Comm. and Utilities	6.27	6.31	6.34	6.34	6.36	6.38	6.41	6.43
% Ch	2.6	2.5	1.7	0.4	1.1	1.2	2.2	0.8
Wholesale Trade	6.53	6.56	6.60	6.65	6.67	6.71	6.75	6.79
% Ch	3.1	2.1	2.4	2.9	1.2	2.4	2.6	2.0
Retail Trade	21.32	21.49	21.68	21.86	21.97	22.13	22.26	22.32
% Ch	0.4	3.2	3.6	3.4	1.9	3.0	2.3	1.2
Finance-Insurance-Real Estate	6.91	6.96	7.00	7.04	7.08	7.10	7.12	7.14
% Ch	2.5	2.5	2.4	2.4	2.1	1.4	1.1	0.9
Services	33.88	34.26	34.53	34.79	35.13	35.46	35.80	36.08
% Ch	3.9	4.6	3.2	3.1	4.0	3.9	3.8	3.2
State and Local Government	16.58	16.66	16.79	16.78	16.85	16.92	16.96	17.01
% Ch	0.9	1.9	3.1	-0.3	1.7	1.6	0.9	1.2
Federal Government	2.78	2.77	2.74	2.73	2.72	2.71	2.70	2.69
% Ch	-2.1	-1.7	-3.7	-1.8	-1.6	-1.9	-1.5	-1.1

Table A2.2

**U.S. Nonagricultural Employment by Industry**

Forecast 1997 to 1999

	1998:1	1998:2	1998:3	1998:4	1999:1	1999:2	1999:3	1999:4
Wage and Salary Employment	123.32	123.83	124.23	124.62	125.01	125.35	125.72	126.07
% Ch	1.7	1.7	1.3	1.3	1.2	1.1	1.2	1.1
Manufacturing	18.11	18.11	18.10	18.08	18.05	18.04	18.02	18.00
% Ch	-0.9	-0.1	-0.1	-0.6	-0.5	-0.3	-0.3	-0.6
Nondurable Manufacturing	7.57	7.58	7.59	7.59	7.59	7.59	7.59	7.58
% Ch	0.1	0.3	0.5	0.2	0.1	-0.1	-0.2	-0.4
Food and Kindred Products	1.65	1.65	1.65	1.66	1.66	1.66	1.65	1.65
% Ch	-0.2	-0.0	0.3	0.9	0.3	-0.4	-0.6	-0.5
Pulp and Paper	0.68	0.68	0.69	0.69	0.69	0.69	0.69	0.69
% Ch	1.1	0.9	0.7	0.5	1.0	0.6	0.6	0.6
Apparel	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
% Ch	-1.1	1.2	0.8	-0.1	0.0	0.6	0.5	-1.0
Printing	1.54	1.55	1.55	1.55	1.55	1.55	1.55	1.55
% Ch	0.5	0.7	0.8	0.1	0.3	0.2	-0.0	0.0
Chemicals	1.02	1.02	1.02	1.02	1.02	1.01	1.01	1.01
% Ch	-0.1	-0.3	-0.3	-0.7	-0.5	-0.9	-1.0	-0.9
Other Nondurables	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.87
% Ch	0.1	0.1	0.5	0.1	-0.2	-0.2	-0.2	-0.5
Durable Manufacturing	10.54	10.53	10.52	10.49	10.46	10.45	10.44	10.42
% Ch	-1.6	-0.5	-0.4	-1.2	-0.9	-0.5	-0.4	-0.7
Lumber and Wood	0.77	0.77	0.77	0.76	0.76	0.76	0.76	0.76
% Ch	0.5	-0.4	-1.4	-1.8	-0.9	-0.5	-0.3	-0.1
Furniture	0.51	0.51	0.51	0.50	0.50	0.50	0.50	0.50
% Ch	0.3	-0.1	-0.8	-1.4	-1.3	-0.6	-0.8	-1.8
Stone-Clay-Glass	0.53	0.53	0.53	0.53	0.53	0.52	0.52	0.52
% Ch	-0.5	-0.5	-0.5	-2.3	-1.7	-1.6	-1.2	-1.0
Primary Metals	0.69	0.70	0.70	0.70	0.69	0.69	0.69	0.69
% Ch	-0.2	0.1	0.4	-0.2	-0.6	-0.5	-0.0	0.4
Fabricated Metals	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46
% Ch	0.1	-0.4	0.1	-0.6	-0.3	0.4	0.4	0.3
Nonelectrical Machinery	2.05	2.05	2.05	2.05	2.04	2.04	2.03	2.03
% Ch	-2.3	-0.4	0.4	-0.4	-1.2	-1.0	-1.0	-1.2
Electrical Machinery	1.57	1.56	1.55	1.55	1.54	1.54	1.54	1.54
% Ch	-5.4	-2.5	-1.6	-1.4	-1.4	-0.8	-0.5	-0.2
Transportation Equipment	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.76
% Ch	-0.9	1.6	0.4	-1.1	0.1	0.1	-0.2	-1.1
Instruments	0.81	0.81	0.80	0.79	0.79	0.78	0.78	0.78
% Ch	-2.3	-2.4	-3.2	-3.6	-2.8	-1.6	-1.3	-2.1
Other Durables	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
% Ch	-0.8	0.1	1.4	0.1	-0.3	0.7	1.5	0.3
Nonmanufacturing	105.21	105.73	106.12	106.55	106.96	107.31	107.69	108.07
% Ch	2.1	2.0	1.5	1.6	1.5	1.3	1.4	1.4
Mining	0.56	0.55	0.55	0.55	0.55	0.55	0.54	0.54
% Ch	-4.0	-3.0	-2.4	-1.4	-1.3	-0.8	-1.0	-1.1
Construction	5.67	5.67	5.65	5.63	5.61	5.62	5.62	5.64
% Ch	1.2	-0.1	-1.2	-1.4	-1.3	0.4	0.5	0.9
Trans., Comm. and Utilities	6.44	6.45	6.46	6.47	6.48	6.48	6.48	6.48
% Ch	0.8	0.9	0.4	0.9	0.2	0.1	0.0	-0.0
Wholesale Trade	6.83	6.87	6.91	6.93	6.95	6.98	7.00	7.02
% Ch	2.4	2.7	2.0	1.3	1.4	1.4	1.1	1.1
Retail Trade	22.46	22.55	22.60	22.69	22.79	22.83	22.88	22.93
% Ch	2.5	1.7	0.9	1.5	1.9	0.7	0.8	1.0
Finance-Insurance-Real Estate	7.15	7.16	7.17	7.18	7.18	7.18	7.20	7.21
% Ch	0.7	0.8	0.2	0.4	0.3	0.2	0.8	0.8
Services	36.34	36.62	36.88	37.14	37.37	37.60	37.80	38.01
% Ch	2.9	3.1	2.8	2.9	2.5	2.4	2.2	2.2
State and Local Government	17.08	17.17	17.25	17.32	17.38	17.45	17.54	17.62
% Ch	1.9	2.1	1.8	1.7	1.4	1.4	2.1	1.8
Federal Government	2.68	2.67	2.66	2.64	2.64	2.63	2.63	2.62
% Ch	-1.4	-1.4	-2.1	-2.5	-0.4	-0.4	0.0	-1.8

Table A2.3

**Washington Nonagricultural Employment by Industry**

Forecast 1997 to 1999

	1992	1993	1994	1995	1996	1997	1998	1999
Wage and Salary Employment	2221.9	2251.7	2304.1	2346.8	2411.5	2484.8	2552.2	2612.2
% Ch	2.0	1.3	2.3	1.9	2.8	3.0	2.7	2.4
Manufacturing	347.2	340.8	336.9	332.3	344.2	365.1	371.5	375.9
% Ch	-1.3	-1.8	-1.1	-1.4	3.6	6.1	1.8	1.2
Nondurable Manufacturing	101.6	103.4	106.3	108.5	109.3	110.4	112.5	114.3
% Ch	1.4	1.8	2.8	2.0	0.8	1.0	1.8	1.7
Food and Kindred Products	38.0	39.0	40.5	42.0	42.2	42.3	43.2	44.1
% Ch	1.2	2.7	3.7	3.8	0.5	0.1	2.3	2.1
Pulp and Paper	17.7	17.2	17.2	17.3	16.9	16.9	17.0	17.1
% Ch	-1.1	-2.8	-0.1	0.6	-2.3	-0.1	0.5	0.7
Apparel	8.2	8.8	9.3	9.2	9.3	9.4	9.4	9.3
% Ch	3.0	7.4	5.1	-1.0	1.5	0.8	-0.1	-0.4
Printing	22.7	23.0	23.5	24.1	24.3	24.6	25.3	25.9
% Ch	1.1	1.4	2.1	2.3	1.1	1.2	2.8	2.4
Chemicals	5.2	5.4	5.6	5.5	5.6	5.8	5.8	5.9
% Ch	0.5	3.2	4.3	-1.6	1.8	2.3	1.3	1.1
Other Nondurables	9.7	9.9	10.2	10.4	10.9	11.5	11.7	11.9
% Ch	7.2	2.2	3.1	1.8	4.9	5.2	1.9	1.9
Durable Manufacturing	245.6	237.4	230.6	223.8	234.9	254.7	259.1	261.5
% Ch	-2.4	-3.4	-2.9	-2.9	5.0	8.4	1.7	1.0
Lumber and Wood	36.5	35.9	36.3	35.4	35.4	35.4	35.0	34.7
% Ch	0.3	-1.8	1.3	-2.4	0.0	-0.0	-1.1	-1.1
Furniture	3.7	3.6	3.7	3.7	4.0	4.0	4.1	4.2
% Ch	-2.5	-4.5	4.2	0.0	7.3	1.3	2.2	1.4
Stone-Clay-Glass	8.1	8.4	8.7	8.8	9.0	9.2	9.3	9.3
% Ch	5.4	3.5	3.0	1.7	1.6	2.9	0.5	0.1
Primary Metals	11.7	11.2	10.8	11.2	11.5	11.8	11.9	11.8
% Ch	-4.9	-3.9	-3.7	3.9	3.0	2.5	0.4	-0.6
Fabricated Metals	11.2	11.5	12.5	13.1	13.3	13.7	13.8	14.1
% Ch	-5.6	2.7	8.3	4.9	1.6	2.9	1.2	1.5
Nonelectrical Machinery	19.5	20.2	20.9	21.9	24.4	25.7	25.7	26.2
% Ch	-2.1	3.9	3.5	4.6	11.4	5.4	0.3	1.7
Electrical Machinery	10.6	11.2	12.3	14.0	15.0	16.5	17.8	19.0
% Ch	-3.2	5.3	10.1	13.8	7.3	9.7	7.8	6.8
Aerospace	111.9	102.7	91.8	80.2	86.2	102.4	105.5	106.5
% Ch	-3.2	-8.2	-10.6	-12.7	7.6	18.8	3.0	0.9
Other Trans. Equip.	11.5	12.0	13.3	14.8	14.1	13.6	13.7	13.6
% Ch	-9.9	4.8	10.5	10.9	-4.8	-3.0	0.1	-0.3
Instruments	14.1	13.5	12.8	12.8	13.6	13.8	13.7	13.6
% Ch	1.8	-4.3	-5.0	0.3	6.2	1.3	-0.8	-0.5
Other Durables	6.8	7.1	7.4	7.9	8.3	8.4	8.5	8.6
% Ch	2.4	4.4	3.8	6.7	5.7	0.9	0.9	1.3
Nonmanufacturing	1874.7	1910.9	1967.2	2014.5	2067.3	2119.7	2180.6	2236.3
% Ch	2.7	1.9	2.9	2.4	2.6	2.5	2.9	2.6
Mining	3.4	3.2	3.4	3.4	3.4	3.4	3.5	3.6
% Ch	-7.5	-5.3	6.5	-1.3	1.1	1.1	1.9	1.5
Construction	119.2	119.1	123.0	122.0	126.7	129.3	130.3	130.7
% Ch	0.9	-0.1	3.3	-0.8	3.9	2.0	0.8	0.4
Trans., Comm. and Utilities	113.6	114.2	116.5	119.6	122.9	126.3	129.2	131.8
% Ch	1.6	0.5	2.0	2.7	2.7	2.8	2.3	2.0
Wholesale Trade	131.5	133.3	138.3	142.5	145.1	149.8	153.0	156.2
% Ch	0.9	1.4	3.8	3.0	1.8	3.2	2.2	2.1
Retail Trade	406.3	413.2	426.6	437.5	445.8	455.3	470.1	483.5
% Ch	2.4	1.7	3.2	2.6	1.9	2.1	3.3	2.9
Finance-Insurance-Real Estate	119.3	121.2	124.1	121.6	123.8	126.2	127.9	129.3
% Ch	2.0	1.6	2.4	-2.0	1.8	1.9	1.4	1.1
Services	557.8	576.7	598.0	623.3	649.3	672.2	699.9	724.8
% Ch	4.1	3.4	3.7	4.2	4.2	3.5	4.1	3.6
State and Local Government	350.2	357.7	365.7	374.4	381.6	389.6	399.8	409.9
% Ch	3.4	2.1	2.3	2.4	1.9	2.1	2.6	2.5
Federal Government	73.4	72.3	71.5	70.1	68.7	67.6	66.9	66.5
% Ch	0.6	-1.4	-1.1	-1.9	-2.1	-1.6	-1.0	-0.6

Table A2.4

**Washington Nonagricultural Employment by Industry**

Forecast 1997 to 1999

	1994:1	1994:2	1994:3	1994:4	1995:1	1995:2	1995:3	1995:4
Wage and Salary Employment	2282.5	2293.9	2313.0	2327.1	2339.6	2346.2	2352.9	2348.5
% Ch	1.6	2.0	3.4	2.5	2.2	1.1	1.2	-0.8
Manufacturing	336.2	335.7	337.0	338.7	339.1	336.8	333.6	319.8
% Ch	-2.1	-0.5	1.5	2.0	0.5	-2.7	-3.7	-15.5
Nondurable Manufacturing	105.2	106.2	106.7	107.3	107.6	108.1	108.5	109.8
% Ch	2.7	3.9	2.1	2.0	1.2	2.0	1.5	5.0
Food and Kindred Products	40.0	40.3	40.7	41.0	41.4	41.9	41.8	43.0
% Ch	1.7	3.6	3.8	2.4	3.9	5.3	-0.5	11.7
Pulp and Paper	17.0	17.2	17.2	17.3	17.3	17.3	17.3	17.2
% Ch	-2.0	4.0	0.3	3.0	-1.1	0.5	1.3	-3.7
Apparel	9.1	9.5	9.3	9.2	9.2	9.2	9.3	9.1
% Ch	10.8	16.7	-7.3	-1.4	-2.3	-1.9	5.3	-6.6
Printing	23.3	23.5	23.6	23.7	23.8	23.9	24.0	24.5
% Ch	3.6	3.5	2.4	1.6	2.2	1.0	2.3	7.5
Chemicals	5.6	5.6	5.6	5.7	5.6	5.5	5.5	5.5
% Ch	0.6	-3.2	1.9	11.5	-7.7	-6.8	-4.7	3.2
Other Nondurables	10.2	10.2	10.3	10.3	10.3	10.3	10.5	10.5
% Ch	6.9	-1.3	6.6	-1.7	0.2	2.0	8.0	-0.6
Durable Manufacturing	231.0	229.6	230.3	231.4	231.5	228.7	225.1	210.0
% Ch	-4.1	-2.5	1.2	2.0	0.1	-4.7	-6.1	-24.2
Lumber and Wood	36.6	36.2	36.4	36.1	36.0	35.4	35.2	35.2
% Ch	4.0	-4.3	1.9	-2.8	-1.1	-6.7	-2.0	-0.2
Furniture	3.6	3.7	3.8	3.8	3.8	3.7	3.7	3.7
% Ch	9.6	14.3	4.1	6.2	-3.1	-9.1	3.0	-2.9
Stone-Clay-Glass	8.6	8.7	8.7	8.7	8.9	8.8	8.8	8.8
% Ch	8.5	2.6	1.6	1.1	5.8	-0.7	-1.0	0.5
Primary Metals	10.9	10.8	10.7	10.8	10.9	11.1	11.4	11.5
% Ch	-2.5	-4.3	-4.4	5.1	3.7	6.7	12.2	2.6
Fabricated Metals	12.1	12.3	12.6	12.9	13.0	13.1	13.1	13.1
% Ch	5.1	10.3	7.8	10.7	3.8	1.7	1.0	0.1
Nonelectrical Machinery	20.4	20.8	20.9	21.5	21.3	21.8	22.0	22.3
% Ch	1.2	6.7	3.3	11.4	-3.2	8.9	4.4	5.4
Electrical Machinery	11.6	12.1	12.7	13.0	13.5	13.9	14.3	14.4
% Ch	6.2	19.7	20.4	10.7	17.0	13.0	9.8	4.0
Aerospace	94.3	91.7	90.9	90.4	88.9	85.8	80.8	65.2
% Ch	-14.1	-10.7	-3.2	-2.2	-6.7	-13.3	-21.4	-57.7
Other Trans. Equip.	12.9	13.2	13.4	13.8	14.7	14.5	15.0	14.8
% Ch	20.0	10.9	6.5	10.1	30.2	-4.6	14.8	-5.1
Instruments	12.9	12.8	12.7	12.8	12.7	12.7	12.9	13.1
% Ch	-10.6	-3.2	-4.7	4.0	-2.1	-0.1	3.8	6.6
Other Durables	7.1	7.3	7.5	7.6	7.8	7.9	7.9	8.0
% Ch	4.1	8.2	15.4	0.5	11.1	5.2	3.2	2.2
Nonmanufacturing	1946.3	1958.2	1976.0	1988.4	2000.6	2009.4	2019.3	2028.7
% Ch	2.3	2.5	3.7	2.5	2.5	1.8	2.0	1.9
Mining	3.3	3.4	3.5	3.5	3.4	3.4	3.3	3.3
% Ch	4.3	12.6	5.5	3.7	-5.9	-7.2	-5.0	2.4
Construction	122.7	123.3	123.5	122.6	122.1	122.4	122.0	121.4
% Ch	-0.8	2.2	0.5	-2.9	-1.4	0.7	-1.1	-2.0
Trans., Comm. and Utilities	114.8	115.4	117.2	118.4	119.4	119.6	118.8	120.8
% Ch	3.0	2.2	6.3	4.2	3.4	0.5	-2.5	6.9
Wholesale Trade	136.6	137.2	138.6	140.9	142.3	142.8	142.8	142.2
% Ch	2.5	1.9	4.0	6.8	3.9	1.4	0.0	-1.6
Retail Trade	421.4	424.5	428.5	432.1	436.0	435.5	438.2	440.4
% Ch	3.4	2.9	3.8	3.4	3.7	-0.5	2.5	2.1
Finance-Insurance-Real Estate	125.9	125.1	123.5	121.9	121.3	121.1	121.3	122.6
% Ch	7.3	-2.5	-5.1	-5.1	-1.7	-0.9	0.6	4.5
Services	587.8	593.6	603.1	607.6	612.7	619.6	627.6	633.5
% Ch	2.4	3.9	6.6	3.0	3.4	4.5	5.3	3.9
State and Local Government	362.2	364.1	366.7	370.0	372.4	374.8	375.8	374.6
% Ch	0.7	2.1	2.9	3.7	2.7	2.6	1.1	-1.3
Federal Government	71.5	71.5	71.5	71.6	70.9	70.4	69.5	69.7
% Ch	-2.1	0.0	-0.1	0.6	-4.0	-2.5	-4.9	0.8



Table A2.4

**Washington Nonagricultural Employment by Industry**

Forecast 1997 to 1999

	1996:1	1996:2	1996:3	1996:4	1997:1	1997:2	1997:3	1997:4
Wage and Salary Employment	2384.2	2398.9	2424.7	2438.4	2456.5	2476.1	2495.1	2511.5
% Ch	6.2	2.5	4.4	2.3	3.0	3.2	3.1	2.6
Manufacturing	337.6	338.4	346.0	355.0	361.1	364.0	366.8	368.7
% Ch	24.1	0.9	9.4	10.8	7.1	3.3	3.1	2.1
Nondurable Manufacturing	110.4	110.1	108.1	108.7	109.5	110.2	110.8	111.3
% Ch	2.0	-0.9	-7.0	2.0	3.0	2.6	2.2	1.6
Food and Kindred Products	43.0	43.2	41.1	41.5	41.8	42.2	42.4	42.6
% Ch	-0.2	2.0	-18.0	4.2	2.8	3.3	2.7	1.9
Pulp and Paper	17.2	16.9	16.8	16.7	16.8	16.9	16.9	16.9
% Ch	-0.3	-7.0	-2.4	-0.5	2.7	0.3	0.3	0.3
Apparel	9.3	9.4	9.3	9.3	9.4	9.4	9.4	9.4
% Ch	8.7	2.8	-2.9	0.5	2.9	1.0	0.4	-0.4
Printing	24.6	24.2	24.2	24.2	24.3	24.5	24.7	24.9
% Ch	2.8	-6.5	0.1	-0.2	2.1	3.2	3.2	2.9
Chemicals	5.6	5.6	5.6	5.7	5.7	5.8	5.8	5.8
% Ch	6.3	2.7	-0.0	4.0	3.3	1.2	1.8	1.5
Other Nondurables	10.7	10.8	11.1	11.2	11.4	11.5	11.6	11.6
% Ch	5.3	5.7	11.1	3.3	6.3	4.6	3.1	1.4
Durable Manufacturing	227.2	228.3	237.9	246.3	251.6	253.8	256.0	257.4
% Ch	37.0	1.8	18.0	14.9	8.9	3.5	3.5	2.3
Lumber and Wood	35.0	34.8	35.7	36.2	36.2	35.2	35.2	35.2
% Ch	-1.8	-2.3	10.6	5.9	-0.5	-10.4	-0.1	0.4
Furniture	4.0	4.0	4.0	4.0	4.0	4.0	4.1	4.1
% Ch	35.3	1.9	1.7	-4.8	2.5	3.9	3.3	2.8
Stone-Clay-Glass	8.7	8.9	9.2	9.2	9.2	9.2	9.3	9.3
% Ch	-5.2	7.6	14.2	-0.4	2.2	0.7	0.8	1.1
Primary Metals	11.5	11.4	11.6	11.6	11.8	11.8	11.9	11.9
% Ch	2.0	-3.1	4.5	2.5	4.1	1.8	2.1	1.1
Fabricated Metals	13.4	13.1	13.3	13.5	13.6	13.7	13.7	13.7
% Ch	7.8	-8.2	5.3	7.2	4.6	0.9	0.9	1.1
Nonelectrical Machinery	23.4	23.8	24.8	25.4	25.6	25.7	25.7	25.7
% Ch	21.1	7.6	17.8	8.7	3.7	1.7	-0.1	-0.4
Electrical Machinery	14.6	14.9	15.2	15.5	15.9	16.3	16.7	17.1
% Ch	5.4	8.4	9.2	7.8	10.8	11.5	10.0	8.0
Aerospace	80.3	81.4	88.1	95.0	99.4	102.0	103.6	104.6
% Ch	131.0	5.3	37.6	35.1	19.8	10.7	6.7	3.9
Other Trans. Equip.	14.6	14.1	13.9	13.6	13.7	13.6	13.6	13.6
% Ch	-6.9	-11.6	-6.6	-7.0	0.5	-0.8	0.2	0.1
Instruments	13.5	13.5	13.7	13.8	13.9	13.8	13.8	13.8
% Ch	13.6	1.5	6.4	1.7	1.3	-0.2	-0.7	-0.8
Other Durables	8.2	8.3	8.3	8.5	8.4	8.4	8.4	8.4
% Ch	14.7	1.1	2.6	8.2	-3.6	-0.7	-0.1	0.8
Nonmanufacturing	2046.6	2060.6	2078.7	2083.4	2095.4	2112.1	2128.3	2142.8
% Ch	3.6	2.8	3.6	0.9	2.3	3.2	3.1	2.7
Mining	3.4	3.4	3.4	3.4	3.4	3.4	3.5	3.5
% Ch	6.7	0.0	-1.3	5.5	-2.5	2.3	2.3	2.2
Construction	124.4	126.3	128.4	127.8	128.5	128.9	129.5	130.1
% Ch	10.2	6.2	6.9	-1.7	2.3	1.1	2.0	1.8
Trans., Comm. and Utilities	121.6	122.6	123.1	124.3	125.1	126.0	126.8	127.5
% Ch	2.8	3.2	1.8	3.9	2.6	2.7	2.6	2.2
Wholesale Trade	142.9	143.3	146.0	148.3	148.8	149.4	150.0	150.9
% Ch	1.7	1.2	7.6	6.7	1.2	1.7	1.7	2.3
Retail Trade	443.2	444.4	447.9	447.5	449.1	453.6	457.6	460.6
% Ch	2.6	1.1	3.1	-0.3	1.5	4.1	3.6	2.7
Finance-Insurance-Real Estate	122.8	123.4	124.2	124.7	125.3	125.9	126.5	127.0
% Ch	0.5	2.2	2.5	1.8	1.9	1.7	2.1	1.5
Services	640.2	647.7	653.2	656.1	660.9	668.5	676.3	683.2
% Ch	4.3	4.7	3.5	1.8	2.9	4.7	4.7	4.1
State and Local Government	378.9	380.4	384.3	382.9	386.4	388.8	390.7	392.8
% Ch	4.7	1.6	4.2	-1.4	3.6	2.5	1.9	2.2
Federal Government	69.2	69.1	68.3	68.2	67.9	67.6	67.5	67.3
% Ch	-2.9	-0.7	-4.3	-0.8	-1.7	-1.4	-1.1	-0.7

Table A2.4

**Washington Nonagricultural Employment by Industry**

Forecast 1997 to 1999

	1998:1	1998:2	1998:3	1998:4	1999:1	1999:2	1999:3	1999:4
Wage and Salary Employment	2529.0	2545.0	2559.7	2575.0	2590.4	2604.5	2619.5	2634.4
% Ch	2.8	2.6	2.3	2.4	2.4	2.2	2.3	2.3
Manufacturing	370.1	371.1	372.1	373.0	374.1	375.2	376.5	377.8
% Ch	1.5	1.1	1.1	1.0	1.2	1.2	1.4	1.4
Nondurable Manufacturing	111.8	112.2	112.7	113.2	113.7	114.1	114.6	115.0
% Ch	1.9	1.6	1.6	1.8	1.9	1.5	1.6	1.5
Food and Kindred Products	42.9	43.1	43.3	43.6	43.9	44.0	44.2	44.4
% Ch	2.4	1.8	2.0	2.6	2.6	1.6	1.6	1.7
Pulp and Paper	16.9	16.9	17.0	17.0	17.0	17.1	17.1	17.1
% Ch	0.8	0.5	0.7	0.4	0.9	0.8	0.9	0.7
Apparel	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.3
% Ch	-0.1	-0.1	-0.2	-0.7	-0.6	-0.4	-0.1	-0.7
Printing	25.1	25.3	25.4	25.6	25.7	25.9	26.0	26.2
% Ch	2.8	2.7	2.5	2.4	2.5	2.3	2.3	2.4
Chemicals	5.8	5.8	5.8	5.9	5.9	5.9	5.9	5.9
% Ch	1.2	1.1	1.1	1.0	1.2	1.0	0.9	1.0
Other Nondurables	11.7	11.7	11.7	11.8	11.8	11.9	12.0	12.1
% Ch	1.5	1.5	1.6	1.7	1.7	2.1	2.5	2.5
Durable Manufacturing	258.3	258.8	259.4	259.8	260.4	261.1	261.9	262.8
% Ch	1.4	0.8	0.8	0.6	0.9	1.1	1.3	1.3
Lumber and Wood	35.2	35.1	35.0	34.8	34.7	34.7	34.6	34.6
% Ch	0.1	-0.8	-1.6	-1.9	-1.0	-0.7	-0.6	-0.4
Furniture	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.2
% Ch	2.0	1.2	1.4	1.4	1.3	1.4	1.5	1.4
Stone-Clay-Glass	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
% Ch	0.8	0.2	-0.1	-0.1	0.0	0.3	0.5	0.6
Primary Metals	11.9	11.9	11.9	11.9	11.8	11.8	11.8	11.8
% Ch	-0.1	-0.6	0.0	-0.9	-1.3	-1.0	0.2	1.1
Fabricated Metals	13.8	13.8	13.9	13.9	14.0	14.0	14.1	14.1
% Ch	1.2	1.0	1.6	1.4	1.6	1.5	1.6	1.5
Nonelectrical Machinery	25.7	25.7	25.8	25.9	25.9	26.1	26.2	26.4
% Ch	-0.3	0.3	1.2	1.4	1.5	2.0	2.4	2.3
Electrical Machinery	17.4	17.7	18.0	18.2	18.5	18.8	19.2	19.6
% Ch	7.2	6.9	6.9	5.9	6.5	6.9	7.9	8.2
Aerospace	105.1	105.4	105.6	105.9	106.1	106.4	106.6	106.9
% Ch	1.9	1.0	1.0	1.0	0.9	0.9	0.9	0.9
Other Trans. Equip.	13.7	13.7	13.7	13.6	13.6	13.6	13.6	13.6
% Ch	0.4	-0.0	0.4	-0.9	-0.0	-0.3	-0.3	-1.1
Instruments	13.8	13.8	13.7	13.6	13.6	13.6	13.7	13.7
% Ch	-0.3	-0.4	-1.9	-1.8	-0.5	0.7	0.6	-0.4
Other Durables	8.4	8.5	8.5	8.5	8.5	8.6	8.6	8.6
% Ch	1.1	1.3	1.6	0.9	0.9	1.5	2.0	1.3
Nonmanufacturing	2159.0	2173.9	2187.6	2202.1	2216.3	2229.3	2243.0	2256.6
% Ch	3.0	2.8	2.5	2.7	2.6	2.4	2.5	2.5
Mining	3.5	3.5	3.5	3.5	3.5	3.6	3.6	3.6
% Ch	2.0	1.7	1.4	1.4	1.5	1.5	1.6	1.7
Construction	130.4	130.3	130.2	130.2	130.3	130.5	130.9	131.2
% Ch	0.9	-0.4	-0.1	-0.1	0.2	0.8	1.0	1.2
Trans., Comm. and Utilities	128.2	128.9	129.5	130.2	130.8	131.4	132.1	132.7
% Ch	2.4	2.1	2.0	2.0	2.0	1.8	2.0	1.9
Wholesale Trade	151.8	152.7	153.4	154.2	155.0	155.8	156.6	157.4
% Ch	2.6	2.3	2.0	2.1	2.1	2.0	2.1	2.0
Retail Trade	465.0	468.7	471.6	475.2	479.2	481.9	484.9	488.1
% Ch	3.9	3.2	2.5	3.1	3.4	2.3	2.5	2.7
Finance-Insurance-Real Estate	127.4	127.7	128.0	128.4	128.7	129.1	129.5	129.9
% Ch	1.4	1.0	1.1	1.0	1.1	1.0	1.2	1.3
Services	689.7	696.6	703.2	710.0	716.0	722.1	727.7	733.5
% Ch	3.9	4.1	3.8	3.9	3.4	3.4	3.2	3.2
State and Local Government	395.7	398.5	401.2	403.8	406.2	408.4	411.3	413.8
% Ch	3.0	2.9	2.7	2.6	2.4	2.2	2.8	2.5
Federal Government	67.2	67.0	66.8	66.5	66.5	66.5	66.6	66.4
% Ch	-0.9	-0.8	-1.3	-1.7	-0.1	-0.0	0.2	-1.1

Table A2.5  
**Washington Nonagricultural Employment by Industry**  
 Historical Data

	1968	1969	1970	1971	1972	1973	1974	1975
Wage and Salary Employment	1099.7	1120.8	1080.5	1065.1	1100.0	1152.1	1199.0	1225.5
% Ch	5.2	1.9	-3.6	-1.4	3.3	4.7	4.1	2.2
Manufacturing	286.9	278.6	239.5	214.7	224.1	244.2	253.6	244.0
% Ch	3.5	-2.9	-14.0	-10.4	4.4	8.9	3.9	-3.8
Nondurable Manufacturing	75.4	75.6	74.5	71.8	72.9	74.3	76.3	75.0
% Ch	1.0	0.3	-1.4	-3.6	1.6	1.8	2.7	-1.7
Food and Kindred Products	29.5	29.8	29.0	28.2	27.7	28.6	29.0	29.0
% Ch	-0.5	1.0	-2.7	-2.6	-1.7	3.3	1.2	0.2
Pulp and Paper	19.9	20.0	19.8	18.1	18.2	17.6	17.7	16.5
% Ch	0.2	0.2	-0.8	-8.8	0.7	-3.0	0.0	-6.8
Apparel	5.4	5.4	5.5	5.6	6.3	6.6	6.9	6.3
% Ch	9.5	0.8	2.2	1.4	12.7	4.0	5.0	-8.6
Printing	10.5	10.7	10.6	10.3	10.6	11.1	11.5	11.6
% Ch	4.0	2.1	-1.2	-2.3	2.5	4.9	3.6	0.8
Chemicals	6.6	6.3	5.9	5.6	5.7	5.4	5.9	6.3
% Ch	-3.8	-4.9	-5.9	-4.7	1.3	-5.0	8.4	6.2
Other Nondurables	3.5	3.5	3.7	4.0	4.4	4.9	5.4	5.3
% Ch	6.9	-1.3	7.8	6.4	10.8	11.0	9.8	-0.9
Durable Manufacturing	211.5	203.0	165.0	142.8	151.2	169.9	177.3	169.0
% Ch	4.5	-4.0	-18.7	-13.4	5.8	12.4	4.3	-4.7
Lumber and Wood	46.0	45.2	42.2	43.3	48.9	51.7	50.8	47.1
% Ch	4.4	-1.7	-6.5	2.6	12.7	5.9	-1.9	-7.1
Furniture	3.4	3.7	3.5	3.2	2.5	2.8	2.9	2.7
% Ch	11.0	7.8	-4.5	-7.6	-22.8	11.6	3.3	-5.5
Stone-Clay-Glass	5.9	6.1	5.8	5.5	5.6	5.8	5.9	6.1
% Ch	6.0	4.4	-5.4	-5.5	2.1	3.1	2.0	4.1
Primary Metals	13.7	15.1	14.1	13.5	13.3	14.5	15.8	14.7
% Ch	3.6	10.6	-6.4	-4.4	-1.2	8.5	9.4	-7.4
Fabricated Metals	7.6	7.9	7.4	6.9	7.6	8.2	8.7	10.1
% Ch	-4.0	4.4	-6.9	-6.8	10.1	8.7	5.5	16.9
Nonelectrical Machinery	9.7	11.1	10.0	9.5	10.5	12.4	13.0	12.5
% Ch	-1.6	14.4	-10.4	-4.9	11.2	18.1	4.6	-4.0
Electrical Machinery	4.8	4.5	4.1	4.9	5.2	5.8	6.4	5.9
% Ch	5.6	-6.3	-7.6	19.3	4.7	11.8	10.1	-7.7
Aerospace	104.5	91.2	61.5	40.5	41.1	50.1	54.1	50.4
% Ch	5.9	-12.8	-32.6	-34.1	1.4	21.9	7.9	-6.9
Other Trans. Equip.	13.2	15.1	13.3	12.1	12.2	13.4	14.4	13.8
% Ch	1.5	14.9	-12.1	-9.4	1.1	9.7	7.4	-3.6
Instruments	NA	NA	NA	NA	NA	NA	NA	2.1
% Ch	NA	NA	NA	NA	NA	NA	NA	NA
Other Durables	NA	NA	NA	NA	NA	NA	NA	3.5
% Ch	NA	NA	NA	NA	NA	NA	NA	NA
Nonmanufacturing	812.8	842.2	840.9	850.5	875.9	907.9	945.4	981.5
% Ch	5.8	3.6	-0.1	1.1	3.0	3.7	4.1	3.8
Mining	1.6	1.6	1.7	1.7	1.9	1.9	2.0	2.0
% Ch	-9.7	1.8	3.9	0.7	9.1	2.6	6.4	-1.0
Construction	58.9	57.6	53.4	53.8	54.5	58.1	57.1	59.5
% Ch	4.6	-2.2	-7.2	0.7	1.3	6.5	-1.7	4.2
Trans., Comm. and Utilities	71.6	73.7	72.2	70.2	70.8	72.8	73.8	72.5
% Ch	3.8	2.9	-2.1	-2.7	0.8	2.8	1.4	-1.8
Wholesale Trade	62.4	64.9	64.6	62.8	70.0	73.9	77.3	79.5
% Ch	2.6	4.0	-0.4	-2.9	11.5	5.6	4.6	2.9
Retail Trade	173.3	180.2	176.3	177.0	179.7	188.8	196.6	206.1
% Ch	4.7	4.0	-2.1	0.4	1.5	5.1	4.1	4.8
Finance-Insurance-Real Estate	55.3	58.3	58.4	57.9	58.8	61.4	63.3	65.0
% Ch	8.8	5.6	0.1	-0.8	1.5	4.4	3.1	2.7
Services	159.6	168.5	169.7	174.5	181.5	192.1	206.0	216.6
% Ch	9.5	5.6	0.7	2.9	4.0	5.9	7.2	5.1
State and Local Government	169.5	177.8	186.5	196.0	202.7	202.9	209.4	219.6
% Ch	7.0	4.9	4.9	5.1	3.4	0.1	3.2	4.9
Federal Government	60.7	59.6	58.1	56.4	56.1	56.1	60.0	60.8
% Ch	0.8	-1.8	-2.5	-2.9	-0.7	0.1	6.9	1.4

Table A2.5

**Washington Nonagricultural Employment by Industry**  
**Historical Data**

	1976	1977	1978	1979	1980	1981	1982	1983
Wage and Salary Employment	1282.9	1366.9	1485.5	1581.1	1609.0	1612.0	1568.8	1586.0
% Ch	4.7	6.5	8.7	6.4	1.8	0.2	-2.7	1.1
Manufacturing	247.4	260.1	284.7	309.7	308.8	303.3	289.0	278.3
% Ch	1.4	5.1	9.5	8.8	-0.3	-1.8	-4.7	-3.7
Nondurable Manufacturing	79.0	82.8	83.1	87.4	87.6	86.5	85.5	85.6
% Ch	5.4	4.9	0.3	5.1	0.3	-1.3	-1.2	0.1
Food and Kindred Products	30.4	31.6	32.8	32.9	32.0	31.7	31.8	31.1
% Ch	4.7	4.1	3.7	0.3	-2.8	-0.9	0.3	-2.2
Pulp and Paper	17.4	17.6	14.0	15.9	17.6	17.2	16.1	15.8
% Ch	5.8	1.2	-20.5	13.2	10.8	-2.0	-6.4	-2.0
Apparel	7.0	7.4	7.4	7.2	6.5	5.7	5.7	5.9
% Ch	10.4	6.0	-0.1	-1.9	-9.9	-12.5	0.2	2.8
Printing	12.0	12.9	14.0	15.4	15.8	15.8	15.8	16.0
% Ch	3.7	7.4	8.6	9.7	2.8	-0.1	-0.2	1.6
Chemicals	6.5	7.3	7.9	8.6	8.7	9.2	9.5	10.1
% Ch	4.4	11.0	9.4	8.3	1.3	5.7	3.2	5.9
Other Nondurables	5.7	6.0	7.0	7.4	7.0	6.9	6.6	6.7
% Ch	6.9	6.3	15.6	5.8	-4.6	-2.0	-4.2	1.8
Durable Manufacturing	168.4	177.2	201.6	222.4	221.2	216.7	203.5	192.7
% Ch	-0.4	5.3	13.8	10.3	-0.5	-2.0	-6.1	-5.3
Lumber and Wood	50.9	54.0	55.1	53.9	47.0	44.4	39.4	42.2
% Ch	8.1	6.1	2.0	-2.1	-12.8	-5.7	-11.3	7.0
Furniture	2.9	3.0	3.2	3.3	3.3	3.3	2.9	3.2
% Ch	6.1	5.0	4.4	2.4	2.1	-1.3	-11.5	11.0
Stone-Clay-Glass	6.3	6.5	6.8	7.1	6.9	6.5	6.0	6.0
% Ch	2.3	3.9	4.3	5.0	-3.4	-5.3	-8.4	1.1
Primary Metals	14.6	14.6	16.4	17.4	16.7	16.3	13.7	12.6
% Ch	-0.4	0.2	12.0	6.0	-4.1	-2.2	-15.7	-8.0
Fabricated Metals	10.0	10.1	10.8	11.5	11.7	11.6	9.9	9.4
% Ch	-1.2	1.2	6.9	6.7	1.6	-1.4	-14.5	-5.5
Nonelectrical Machinery	11.9	12.3	13.5	15.1	15.0	15.1	16.6	15.3
% Ch	-4.5	3.0	10.1	11.9	-0.7	0.6	9.7	-8.0
Electrical Machinery	6.1	7.1	8.2	10.0	11.2	10.5	10.6	10.3
% Ch	3.8	16.5	15.4	21.7	12.1	-6.1	0.9	-2.6
Aerospace	45.0	46.1	59.8	72.6	79.6	79.0	74.9	65.0
% Ch	-10.7	2.5	29.6	21.5	9.6	-0.8	-5.1	-13.3
Other Trans. Equip.	14.3	16.6	20.0	21.0	18.7	18.4	17.2	15.2
% Ch	3.4	15.9	20.2	5.3	-11.0	-1.4	-6.8	-11.4
Instruments	2.4	2.8	3.5	5.6	6.3	7.4	8.4	9.4
% Ch	10.1	19.4	24.3	60.6	12.8	15.9	13.6	12.4
Other Durables	4.0	4.0	4.3	4.7	4.6	4.3	4.0	4.2
% Ch	14.2	-0.2	9.7	9.2	-2.3	-7.2	-7.4	5.0
Nonmanufacturing	1035.5	1106.8	1200.8	1271.4	1300.2	1308.8	1279.8	1307.7
% Ch	5.5	6.9	8.5	5.9	2.3	0.7	-2.2	2.2
Mining	2.1	2.3	2.8	3.0	3.2	3.1	3.0	2.7
% Ch	4.8	10.6	20.0	8.2	5.5	-3.4	-2.8	-9.8
Construction	66.9	77.5	92.6	104.2	92.9	90.4	76.4	74.1
% Ch	12.6	15.9	19.4	12.5	-10.8	-2.8	-15.5	-2.9
Trans., Comm. and Utilities	75.3	78.8	83.8	89.4	91.4	90.1	89.0	87.9
% Ch	4.0	4.6	6.3	6.7	2.2	-1.4	-1.3	-1.1
Wholesale Trade	84.0	89.1	95.5	102.3	100.6	101.7	100.9	100.5
% Ch	5.6	6.1	7.2	7.1	-1.7	1.1	-0.7	-0.4
Retail Trade	222.8	239.9	262.3	276.9	280.8	286.6	284.5	293.3
% Ch	8.1	7.7	9.3	5.6	1.4	2.0	-0.7	3.1
Finance-Insurance-Real Estate	68.2	75.0	83.3	89.4	91.8	92.3	90.7	92.3
% Ch	4.9	9.9	11.2	7.2	2.7	0.5	-1.8	1.8
Services	231.4	249.3	272.4	290.8	308.5	318.3	316.9	332.8
% Ch	6.8	7.7	9.3	6.8	6.1	3.2	-0.4	5.0
State and Local Government	223.8	232.9	244.5	250.7	263.0	259.9	252.2	256.4
% Ch	1.9	4.1	5.0	2.5	4.9	-1.2	-3.0	1.7
Federal Government	61.0	61.9	63.6	64.7	67.9	66.5	66.3	67.6
% Ch	0.4	1.5	2.7	1.7	4.9	-2.1	-0.3	1.9

Table A2.5

**Washington Nonagricultural Employment by Industry**  
**Historical Data**

	1984	1985	1986	1987	1988	1989	1990	1991
Wage and Salary Employment	1659.7	1710.3	1769.9	1851.5	1941.1	2046.3	2142.4	2177.4
% Ch	4.6	3.0	3.5	4.6	4.8	5.4	4.7	1.6
Manufacturing	288.1	295.6	305.0	318.4	341.5	361.5	369.4	351.9
% Ch	3.5	2.6	3.2	4.4	7.3	5.8	2.2	-4.7
Nondurable Manufacturing	88.2	90.6	92.1	94.4	100.2	103.4	108.4	100.1
% Ch	3.1	2.7	1.6	2.5	6.2	3.2	4.9	-7.7
Food and Kindred Products	30.8	31.1	31.1	32.3	34.0	35.4	37.6	37.6
% Ch	-0.8	0.9	-0.1	4.0	5.1	4.1	6.3	-0.2
Pulp and Paper	16.2	16.7	16.7	16.6	17.1	17.9	18.1	17.9
% Ch	2.4	3.6	-0.3	-0.8	3.1	5.0	0.8	-1.1
Apparel	6.5	6.2	6.0	5.4	7.7	7.8	7.9	8.0
% Ch	11.0	-4.3	-3.0	-11.3	43.3	1.0	2.3	0.3
Printing	16.9	17.6	18.7	20.1	21.3	21.7	22.5	22.5
% Ch	5.1	4.5	6.2	7.4	5.8	2.0	4.0	-0.3
Chemicals	10.5	11.3	11.5	11.4	12.5	12.2	13.2	5.2
% Ch	4.4	7.2	2.0	-0.6	9.0	-1.9	8.3	-60.7
Other Nondurables	7.3	7.6	8.0	8.6	7.7	8.4	9.0	9.1
% Ch	8.9	4.1	5.6	6.8	-10.3	9.1	7.2	0.6
Durable Manufacturing	199.9	205.0	212.9	224.0	241.4	258.1	260.9	251.8
% Ch	3.7	2.5	3.9	5.2	7.7	6.9	1.1	-3.5
Lumber and Wood	41.3	38.3	38.4	40.4	41.7	41.1	39.9	36.4
% Ch	-1.9	-7.4	0.4	5.0	3.2	-1.2	-3.0	-8.9
Furniture	3.5	3.8	3.9	3.8	4.2	4.0	4.1	3.8
% Ch	8.5	8.7	1.6	-2.2	10.3	-5.0	3.8	-6.7
Stone-Clay-Glass	6.5	6.4	6.2	6.9	7.3	7.5	7.9	7.7
% Ch	6.9	-0.6	-2.7	9.8	6.9	2.3	5.8	-2.5
Primary Metals	13.4	12.7	11.6	11.3	12.6	13.0	13.0	12.3
% Ch	5.8	-4.7	-8.6	-2.6	11.4	2.6	0.3	-5.6
Fabricated Metals	9.9	9.7	10.0	10.5	10.9	11.8	12.2	11.9
% Ch	6.1	-2.4	2.8	5.0	3.9	8.5	3.6	-2.8
Nonelectrical Machinery	16.4	17.1	17.6	16.2	18.0	19.3	20.5	19.9
% Ch	7.6	3.9	2.9	-7.6	10.7	7.3	6.3	-3.1
Electrical Machinery	11.8	12.1	12.7	13.2	10.5	11.4	11.4	11.0
% Ch	14.7	2.4	4.8	3.8	-20.4	8.4	0.1	-3.7
Aerospace	66.6	76.1	84.9	92.9	101.0	113.7	116.2	115.6
% Ch	2.5	14.3	11.7	9.4	8.7	12.5	2.2	-0.6
Other Trans. Equip.	15.6	13.5	12.6	13.3	15.1	15.3	14.8	12.8
% Ch	2.4	-13.3	-7.0	5.8	13.8	1.1	-3.3	-13.7
Instruments	10.2	10.7	10.4	10.8	14.6	15.2	14.7	13.8
% Ch	8.9	5.0	-2.9	3.3	35.6	4.0	-3.4	-5.6
Other Durables	4.6	4.5	4.5	4.8	5.4	5.9	6.1	6.7
% Ch	11.2	-3.2	1.3	4.6	14.4	7.6	4.8	8.4
Nonmanufacturing	1371.7	1414.7	1464.9	1533.1	1599.5	1684.8	1773.0	1825.5
% Ch	4.9	3.1	3.5	4.7	4.3	5.3	5.2	3.0
Mining	2.6	2.7	2.9	3.0	3.3	3.6	3.7	3.7
% Ch	-1.8	1.4	8.9	4.5	7.1	9.2	5.1	-2.2
Construction	79.5	80.4	84.4	88.8	96.5	106.7	117.3	118.2
% Ch	7.2	1.1	5.0	5.2	8.6	10.6	9.9	0.8
Trans., Comm. and Utilities	91.2	93.6	96.2	98.5	101.8	108.3	113.0	111.9
% Ch	3.7	2.6	2.8	2.4	3.4	6.3	4.4	-1.0
Wholesale Trade	104.7	105.7	107.3	111.3	116.3	123.8	128.5	130.2
% Ch	4.2	1.0	1.5	3.8	4.4	6.5	3.8	1.3
Retail Trade	306.8	314.9	329.1	346.7	360.8	378.2	392.9	397.0
% Ch	4.6	2.6	4.5	5.3	4.1	4.8	3.9	1.0
Finance-Insurance-Real Estate	95.7	99.6	104.9	107.5	109.2	112.2	115.5	116.9
% Ch	3.7	4.1	5.3	2.4	1.6	2.8	2.9	1.3
Services	356.6	375.0	390.9	420.1	443.0	472.2	504.3	536.0
% Ch	7.1	5.2	4.3	7.5	5.5	6.6	6.8	6.3
State and Local Government	265.7	272.8	279.8	286.6	297.4	307.8	323.9	338.7
% Ch	3.6	2.7	2.6	2.4	3.8	3.5	5.2	4.6
Federal Government	68.9	70.1	69.2	70.6	71.4	72.1	73.7	72.9
% Ch	1.9	1.7	-1.2	2.0	1.1	0.9	2.3	-1.1

Table A3.1  
**U.S. Personal Income by Component**  
 Forecast 1997 to 1999

	1992	1993	1994	1995	1996	1997	1998	1999
Personal Income	5264.2	5480.1	5753.1	6115.1	6452.8	6805.4	7136.4	7476.0
% Ch	6.0	4.1	5.0	6.3	5.5	5.5	4.9	4.8
Total Wage and Salary Disbursements	2986.4	3090.7	3241.8	3430.6	3630.1	3835.2	4018.7	4198.5
% Ch	5.6	3.5	4.9	5.8	5.8	5.7	4.8	4.5
Nonwage Personal Income	2277.8	2389.4	2511.3	2684.5	2822.7	2970.2	3117.7	3277.5
% Ch	6.4	4.9	5.1	6.9	5.1	5.2	5.0	5.1
Other Labor Income	351.4	380.9	402.2	424.0	436.2	458.1	485.1	513.3
% Ch	8.9	8.4	5.6	5.4	2.9	5.0	5.9	5.8
Proprietor's Income	409.5	420.1	450.9	478.3	518.1	530.4	544.4	568.3
% Ch	12.8	2.6	7.3	6.1	8.3	2.4	2.6	4.4
Farm	38.0	32.0	35.0	29.0	46.2	40.3	39.3	42.4
% Ch	25.7	-15.8	9.6	-17.2	59.3	-12.8	-2.4	7.8
Nonfarm	371.5	388.1	415.9	449.3	471.9	490.1	505.1	525.8
% Ch	11.7	4.5	7.2	8.0	5.0	3.9	3.1	4.1
Less: Pers Cont. For Social Ins.	248.4	259.6	278.1	294.5	307.6	321.5	337.7	353.7
% Ch	5.3	4.5	7.1	5.9	4.4	4.5	5.0	4.7
Dividends/Int./Rent	907.3	937.4	979.9	1054.1	1095.8	1160.8	1222.6	1277.0
% Ch	-1.5	3.3	4.5	7.6	4.0	5.9	5.3	4.5
Transfer Payments	858.2	910.7	956.4	1022.6	1080.1	1142.4	1203.3	1272.6
% Ch	11.5	6.1	5.0	6.9	5.6	5.8	5.3	5.8

Table A3.2

**U.S. Personal Income by Component**

Forecast 1997 to 1999

	1994:1	1994:2	1994:3	1994:4	1995:1	1995:2	1995:3	1995:4
Personal Income	5562.4	5739.1	5808.2	5902.7	6004.5	6074.4	6146.9	6234.5
% Ch	-3.4	13.3	4.9	6.7	7.1	4.7	4.9	5.8
Total Wage and Salary Disbursements	3142.0	3233.8	3266.6	3324.9	3367.9	3403.1	3451.2	3500.2
% Ch	-6.2	12.2	4.1	7.3	5.3	4.3	5.8	5.8
Nonwage Personal Income	2420.4	2505.3	2541.6	2577.8	2636.6	2671.3	2695.8	2734.3
% Ch	0.4	14.8	5.9	5.8	9.4	5.4	3.7	5.8
Other Labor Income	395.6	400.5	404.9	407.8	417.7	422.0	425.9	430.2
% Ch	8.1	5.0	4.5	2.9	10.1	4.2	3.7	4.1
Proprietor's Income	421.1	454.4	458.7	469.4	472.0	474.7	479.6	486.7
% Ch	-12.1	35.6	3.8	9.7	2.2	2.3	4.2	6.1
Farm	40.8	35.1	31.9	32.3	28.5	27.6	28.1	31.8
% Ch	97.9	-45.2	-31.8	5.1	-39.4	-12.2	8.3	63.8
Nonfarm	380.3	419.3	426.8	437.1	443.5	447.1	451.5	454.9
% Ch	-18.7	47.8	7.3	10.0	6.0	3.3	4.0	3.1
Less: Pers Cont. For Social Ins.	271.4	277.6	279.9	283.5	290.2	292.7	296.2	298.8
% Ch	10.0	9.5	3.4	5.2	9.8	3.4	5.0	3.6
Dividends/Int./Rent	935.3	978.1	996.5	1009.5	1034.7	1050.4	1056.6	1074.8
% Ch	-0.5	19.6	7.7	5.3	10.4	6.2	2.4	7.1
Transfer Payments	939.5	949.8	961.4	974.7	1002.4	1016.8	1029.9	1041.4
% Ch	7.1	4.5	5.0	5.6	11.9	5.9	5.3	4.5

Table A3.2

**U.S. Personal Income by Component**

Forecast 1997 to 1999

	1996:1	1996:2	1996:3	1996:4	1997:1	1997:2	1997:3	1997:4
Personal Income	6308.5	6412.4	6501.4	6588.8	6683.9	6765.5	6845.7	6926.5
% Ch	4.8	6.8	5.7	5.5	5.9	5.0	4.8	4.8
Total Wage and Salary Disbursements	3538.2	3606.5	3659.6	3715.9	3763.8	3813.3	3858.5	3905.1
% Ch	4.4	7.9	6.0	6.3	5.3	5.4	4.8	4.9
Nonwage Personal Income	2770.2	2805.9	2841.8	2872.9	2920.0	2952.2	2987.2	3021.4
% Ch	5.4	5.3	5.2	4.4	6.7	4.5	4.8	4.7
Other Labor Income	429.1	434.0	438.6	442.9	447.7	454.9	461.7	468.3
% Ch	-1.0	4.6	4.3	4.0	4.4	6.6	6.1	5.9
Proprietor's Income	499.5	515.2	526.4	531.5	529.5	529.9	530.6	531.6
% Ch	10.9	13.2	9.0	3.9	-1.5	0.3	0.5	0.7
Farm	38.4	45.8	51.8	49.0	43.4	41.1	39.5	37.3
% Ch	110.9	102.8	63.9	-19.9	-38.7	-19.5	-14.3	-20.9
Nonfarm	461.1	469.4	474.6	482.5	486.1	488.9	491.1	494.3
% Ch	5.6	7.4	4.5	6.8	3.0	2.3	1.8	2.6
Less: Pers Cont. For Social Ins.	301.0	305.8	309.7	313.7	316.7	319.4	323.1	326.8
% Ch	3.0	6.5	5.2	5.3	3.8	3.5	4.7	4.6
Dividends/Int./Rent	1079.6	1086.9	1101.4	1115.2	1135.2	1152.0	1170.1	1185.8
% Ch	1.8	2.7	5.4	5.1	7.4	6.1	6.4	5.5
Transfer Payments	1063.0	1075.6	1085.1	1096.8	1124.3	1134.8	1147.9	1162.5
% Ch	8.6	4.8	3.6	4.4	10.4	3.8	4.7	5.2



Table A3.2

**U.S. Personal Income by Component**

Forecast 1997 to 1999

	1998:1	1998:2	1998:3	1998:4	1999:1	1999:2	1999:3	1999:4
Personal Income	7021.2	7098.7	7173.8	7252.2	7347.4	7432.0	7518.8	7605.7
% Ch	5.6	4.5	4.3	4.4	5.4	4.7	4.8	4.7
Total Wage and Salary Disbursements	3953.2	3998.1	4040.8	4082.8	4132.0	4176.3	4220.3	4265.3
% Ch	5.0	4.6	4.3	4.2	4.9	4.4	4.3	4.3
Nonwage Personal Income	3068.0	3100.6	3132.9	3169.4	3215.4	3255.7	3298.6	3340.3
% Ch	6.3	4.3	4.2	4.7	5.9	5.1	5.4	5.2
Other Labor Income	475.1	481.9	488.4	495.0	502.5	509.6	516.9	524.1
% Ch	5.9	5.8	5.5	5.5	6.1	5.8	5.8	5.7
Proprietor's Income	537.2	542.0	546.4	552.1	558.2	564.8	571.6	578.4
% Ch	4.3	3.6	3.3	4.3	4.4	4.9	4.9	4.8
Farm	38.3	39.0	39.6	40.4	41.2	42.1	42.9	43.5
% Ch	11.9	7.2	6.3	8.6	8.3	8.1	8.0	6.3
Nonfarm	498.9	503.0	506.8	511.7	516.9	522.8	528.7	534.9
% Ch	3.7	3.4	3.0	4.0	4.1	4.6	4.6	4.7
Less: Pers Cont. for Social Ins.	333.1	335.9	339.2	342.6	349.5	351.7	354.9	358.7
% Ch	8.0	3.4	4.0	4.1	8.3	2.6	3.6	4.4
Dividends/Int./Rent	1207.2	1217.4	1227.7	1238.2	1257.4	1268.9	1283.6	1298.1
% Ch	7.4	3.4	3.4	3.5	6.4	3.7	4.7	4.6
Transfer Payments	1181.5	1195.2	1209.7	1226.7	1246.8	1264.0	1281.3	1298.4
% Ch	6.7	4.7	4.9	5.7	6.7	5.6	5.6	5.5

Table A3.3  
**Washington Personal Income by Component**  
 Forecast 1997 to 1999

	1992	1993	1994	1995	1996	1997	1998	1999
Personal Income	110.462	115.788	121.606	129.117	137.498	146.486	155.125	164.252
% Ch	7.9	4.8	5.0	6.2	6.5	6.5	5.9	5.9
Total Wage and Salary Disbursements	62.921	64.613	67.635	71.591	76.989	82.477	87.442	92.605
% Ch	8.5	2.7	4.7	5.8	7.5	7.1	6.0	5.9
Manufacturing	12.358	12.070	12.320	12.627	13.568	14.919	15.759	16.589
% Ch	5.4	-2.3	2.1	2.5	7.4	10.0	5.6	5.3
Nondurable Manufacturing	2.957	3.115	3.297	3.464	3.542	3.735	3.944	4.167
% Ch	4.9	5.3	5.8	5.1	2.3	5.4	5.6	5.7
Durable Manufacturing	9.400	8.955	9.023	9.163	10.025	11.184	11.815	12.422
% Ch	5.5	-4.7	0.8	1.6	9.4	11.6	5.6	5.1
Nonmanufacturing	47.756	49.743	52.449	55.876	60.176	64.159	68.136	72.294
% Ch	9.7	4.2	5.4	6.5	7.7	6.6	6.2	6.1
Other Private Wages	0.661	0.631	0.669	0.709	0.683	0.758	0.817	0.879
% Ch	2.4	-4.5	6.0	5.9	-3.6	11.0	7.8	7.6
Farm Wages	0.494	0.526	0.554	0.641	0.711	0.744	0.777	0.812
% Ch	-1.6	6.5	5.2	15.9	10.8	4.7	4.4	4.5
Military Wages	1.652	1.643	1.644	1.738	1.851	1.896	1.953	2.031
% Ch	6.1	-0.6	0.0	5.7	6.5	2.4	3.0	4.0
Nonwage Personal Income	47.541	51.175	53.972	57.526	60.509	64.009	67.683	71.646
% Ch	7.1	7.6	5.5	6.6	5.2	5.8	5.7	5.9
Other Labor Income	6.612	7.184	7.610	8.025	8.412	9.048	9.713	10.428
% Ch	11.2	8.6	5.9	5.5	4.8	7.6	7.4	7.4
Proprietor's Income	9.531	10.557	10.720	11.433	12.387	12.850	13.267	13.813
% Ch	10.2	10.8	1.5	6.6	8.3	3.7	3.2	4.1
Farm	0.950	1.162	0.647	0.574	0.932	0.813	0.834	0.861
% Ch	43.4	22.3	-44.3	-11.4	62.5	-12.7	2.6	3.2
Nonfarm	8.581	9.395	10.073	10.859	11.455	12.037	12.433	12.951
% Ch	7.4	9.5	7.2	7.8	5.5	5.1	3.3	4.2
Less: Pers. Cont. for Social Ins.	5.579	5.774	6.169	6.543	6.936	7.370	7.833	8.316
% Ch	8.6	3.5	6.8	6.1	6.0	6.3	6.3	6.2
Plus: Residence Adjustment	1.074	1.185	1.307	1.422	1.523	1.606	1.694	1.790
% Ch	8.3	10.3	10.3	8.8	7.1	5.4	5.5	5.7
Dividends/Int./Rent	18.666	19.632	20.860	22.128	22.866	24.321	25.856	27.288
% Ch	2.4	5.2	6.3	6.1	3.3	6.4	6.3	5.5
Transfer Payments	17.236	18.392	19.644	21.062	22.259	23.555	24.985	26.644
% Ch	9.6	6.7	6.8	7.2	5.7	5.8	6.1	6.6
State U.I. Benefits	0.902	1.092	1.023	0.871	0.878	0.839	0.862	0.924
% Ch	37.9	21.1	-6.3	-14.9	0.8	-4.5	2.8	7.1
Other Transfers	16.335	17.300	18.621	20.191	21.381	22.716	24.124	25.720
% Ch	8.4	5.9	7.6	8.4	5.9	6.2	6.2	6.6

Table A3.4  
**Washington Personal Income by Component**  
 Forecast 1997 to 1999

	1994:1	1994:2	1994:3	1994:4	1995:1	1995:2	1995:3	1995:4
Personal Income	117.304	121.605	122.458	125.057	125.941	128.286	130.289	131.950
% Ch	-4.1	15.5	2.8	8.8	2.9	7.7	6.4	5.2
Total Wage and Salary Disbursements	65.248	67.773	67.773	69.744	69.529	71.053	72.468	73.313
% Ch	-4.6	16.4	0.0	12.2	-1.2	9.1	8.2	4.7
Manufacturing	11.992	12.537	12.116	12.633	12.489	12.860	12.771	12.388
% Ch	-3.7	19.5	-12.8	18.2	-4.5	12.4	-2.7	-11.5
Nondurable Manufacturing	3.129	3.281	3.324	3.452	3.393	3.423	3.482	3.558
% Ch	-11.9	20.9	5.3	16.3	-6.7	3.6	7.1	9.0
Durable Manufacturing	8.863	9.256	8.792	9.181	9.096	9.437	9.289	8.830
% Ch	-0.5	19.0	-18.6	18.9	-3.7	15.9	-6.1	-18.3
Nonmanufacturing	50.388	52.421	52.802	54.184	54.013	55.121	56.592	57.778
% Ch	-5.3	17.1	2.9	10.9	-1.3	8.5	11.1	8.7
Other Private Wages	0.674	0.631	0.661	0.711	0.709	0.719	0.717	0.690
% Ch	-7.9	-23.2	20.4	33.9	-1.1	5.8	-1.1	-14.2
Farm Wages	0.549	0.548	0.554	0.563	0.590	0.626	0.661	0.688
% Ch	7.6	-0.7	4.5	6.7	20.6	26.7	24.3	17.4
Military Wages	1.645	1.636	1.640	1.653	1.728	1.727	1.727	1.769
% Ch	10.1	-2.2	1.0	3.2	19.4	-0.2	0.0	10.1
Nonwage Personal Income	52.056	53.832	54.685	55.313	56.412	57.233	57.821	58.637
% Ch	-3.6	14.4	6.5	4.7	8.2	5.9	4.2	5.8
Other Labor Income	7.438	7.628	7.609	7.763	7.825	8.024	8.118	8.133
% Ch	9.7	10.6	-1.0	8.3	3.2	10.6	4.8	0.7
Proprietor's Income	10.133	10.814	10.886	11.047	11.249	11.363	11.485	11.634
% Ch	-32.1	29.7	2.7	6.0	7.5	4.1	4.4	5.3
Farm	0.818	0.674	0.589	0.508	0.579	0.542	0.546	0.627
% Ch	-84.3	-53.9	-41.7	-44.7	68.8	-23.2	3.0	73.9
Nonfarm	9.315	10.140	10.297	10.539	10.670	10.821	10.939	11.007
% Ch	-20.4	40.4	6.3	9.7	5.1	5.8	4.4	2.5
Less: Pers. Cont. for Social Ins.	5.989	6.184	6.175	6.326	6.376	6.505	6.623	6.666
% Ch	11.9	13.7	-0.6	10.1	3.2	8.3	7.5	2.6
Plus: Residence Adjustment	1.279	1.286	1.320	1.342	1.383	1.389	1.436	1.478
% Ch	19.2	2.2	11.0	6.8	12.8	1.7	14.2	12.2
Dividends/Int./Rent	20.001	20.788	21.195	21.456	21.844	22.054	22.121	22.491
% Ch	5.1	16.7	8.1	5.0	7.4	3.9	1.2	6.9
Transfer Payments	19.194	19.500	19.850	20.031	20.487	20.908	21.284	21.567
% Ch	5.3	6.5	7.4	3.7	9.4	8.5	7.4	5.4
State U.I. Benefits	1.130	1.064	1.045	0.854	0.806	0.868	0.917	0.893
% Ch	-38.5	-21.4	-7.0	-55.4	-20.7	34.5	24.6	-10.1
Other Transfers	18.064	18.436	18.805	19.177	19.681	20.040	20.367	20.674
% Ch	9.2	8.5	8.2	8.2	10.9	7.5	6.7	6.2

Table A3.4  
**Washington Personal Income by Component**  
 Forecast 1997 to 1999

	1996:1	1996:2	1996:3	1996:4	1997:1	1997:2	1997:3	1997:4
Personal Income	133.804	136.419	138.880	140.888	143.307	145.442	147.502	149.693
% Ch	5.7	8.0	7.4	5.9	7.0	6.1	5.8	6.1
Total Wage and Salary Disbursements	74.459	76.232	77.930	79.333	80.611	81.883	83.058	84.356
% Ch	6.4	9.9	9.2	7.4	6.6	6.5	5.9	6.4
Manufacturing	13.129	13.372	13.596	14.174	14.550	14.807	15.041	15.280
% Ch	26.2	7.6	6.9	18.1	11.0	7.3	6.5	6.5
Nondurable Manufacturing	3.499	3.537	3.536	3.598	3.654	3.711	3.761	3.815
% Ch	-6.5	4.4	-0.1	7.2	6.4	6.4	5.5	5.8
Durable Manufacturing	9.630	9.835	10.060	10.576	10.896	11.096	11.280	11.465
% Ch	41.5	8.8	9.5	22.1	12.7	7.5	6.8	6.7
Nonmanufacturing	58.146	59.606	61.074	61.878	62.697	63.689	64.608	65.644
% Ch	2.6	10.4	10.2	5.4	5.4	6.5	5.9	6.6
Other Private Wages	0.613	0.695	0.705	0.719	0.736	0.751	0.765	0.780
% Ch	-37.7	65.2	5.9	8.0	10.0	8.2	7.8	8.1
Farm Wages	0.697	0.706	0.716	0.724	0.732	0.740	0.748	0.756
% Ch	5.3	5.3	5.8	4.4	4.8	4.4	4.3	4.5
Military Wages	1.874	1.853	1.839	1.839	1.896	1.896	1.896	1.896
% Ch	25.9	-4.4	-3.0	0.0	13.0	0.0	0.0	0.0
Nonwage Personal Income	59.345	60.187	60.950	61.555	62.696	63.559	64.444	65.338
% Ch	4.9	5.8	5.2	4.0	7.6	5.6	5.7	5.7
Other Labor Income	8.142	8.328	8.522	8.654	8.792	8.965	9.131	9.302
% Ch	0.4	9.5	9.6	6.4	6.5	8.1	7.6	7.7
Proprietor's Income	11.920	12.335	12.657	12.636	12.715	12.818	12.891	12.977
% Ch	10.2	14.7	10.9	-0.7	2.5	3.3	2.3	2.7
Farm	0.777	0.954	1.131	0.866	0.811	0.812	0.815	0.816
% Ch	135.8	127.3	97.5	-65.7	-23.1	0.5	1.6	0.7
Nonfarm	11.143	11.381	11.526	11.770	11.905	12.007	12.076	12.161
% Ch	5.0	8.8	5.2	8.7	4.7	3.5	2.3	2.8
Less: Pers. Cont. for Social Ins.	6.694	6.879	7.032	7.141	7.231	7.312	7.415	7.524
% Ch	1.7	11.5	9.2	6.3	5.1	4.6	5.8	6.0
Plus: Residence Adjustment	1.489	1.511	1.535	1.556	1.574	1.595	1.616	1.637
% Ch	3.0	6.0	6.5	5.6	4.7	5.4	5.3	5.5
Dividends/Int./Rent	22.572	22.686	22.941	23.264	23.714	24.109	24.538	24.923
% Ch	1.4	2.0	4.6	5.7	8.0	6.8	7.3	6.4
Transfer Payments	21.916	22.206	22.327	22.586	23.131	23.383	23.684	24.023
% Ch	6.6	5.4	2.2	4.7	10.0	4.4	5.3	5.9
State U.I. Benefits	0.888	0.922	0.852	0.851	0.846	0.832	0.835	0.842
% Ch	-2.2	16.2	-27.1	-0.7	-2.2	-6.2	1.2	3.4
Other Transfers	21.028	21.284	21.475	21.735	22.285	22.550	22.849	23.181
% Ch	7.0	5.0	3.6	4.9	10.5	4.8	5.4	5.9

Table A3.4  
**Washington Personal Income by Component**  
 Forecast 1997 to 1999

	1998:1	1998:2	1998:3	1998:4	1999:1	1999:2	1999:3	1999:4
Personal Income	152.066	154.083	156.113	158.240	160.700	163.023	165.421	167.863
% Ch	6.5	5.4	5.4	5.6	6.4	5.9	6.0	6.0
Total Wage and Salary Disbursements	85.635	86.830	88.045	89.259	90.620	91.930	93.250	94.621
% Ch	6.2	5.7	5.7	5.6	6.2	5.9	5.9	6.0
Manufacturing	15.477	15.661	15.856	16.043	16.252	16.474	16.698	16.933
% Ch	5.3	4.8	5.1	4.8	5.3	5.6	5.6	5.8
Nondurable Manufacturing	3.866	3.916	3.970	4.024	4.082	4.139	4.195	4.254
% Ch	5.5	5.3	5.6	5.5	5.9	5.7	5.6	5.8
Durable Manufacturing	11.611	11.744	11.886	12.019	12.170	12.335	12.503	12.679
% Ch	5.2	4.7	4.9	4.5	5.1	5.5	5.5	5.7
Nonmanufacturing	66.643	67.633	68.631	69.636	70.684	71.747	72.817	73.927
% Ch	6.2	6.1	6.0	6.0	6.2	6.2	6.1	6.2
Other Private Wages	0.796	0.810	0.824	0.838	0.855	0.871	0.887	0.904
% Ch	8.7	7.0	6.9	7.2	8.3	7.6	7.7	7.7
Farm Wages	0.765	0.773	0.781	0.789	0.798	0.807	0.817	0.826
% Ch	4.8	4.2	4.2	4.3	4.8	4.6	4.6	4.7
Military Wages	1.953	1.953	1.953	1.953	2.031	2.031	2.031	2.031
% Ch	12.6	0.0	0.0	0.0	17.0	0.0	0.0	0.0
Nonwage Personal Income	66.431	67.253	68.068	68.981	70.080	71.093	72.171	73.241
% Ch	6.9	5.0	4.9	5.5	6.5	5.9	6.2	6.1
Other Labor Income	9.468	9.630	9.793	9.962	10.146	10.332	10.521	10.714
% Ch	7.4	7.0	7.0	7.1	7.6	7.5	7.5	7.6
Proprietor's Income	13.111	13.215	13.307	13.437	13.572	13.724	13.890	14.063
% Ch	4.2	3.2	2.8	4.0	4.1	4.6	4.9	5.1
Farm	0.825	0.831	0.837	0.844	0.851	0.858	0.865	0.871
% Ch	4.2	3.2	3.0	3.3	3.3	3.3	3.2	3.0
Nonfarm	12.286	12.383	12.469	12.592	12.721	12.867	13.025	13.192
% Ch	4.2	3.2	2.8	4.0	4.2	4.6	5.0	5.2
Less: Pers. Cont. for Social Ins.	7.693	7.776	7.878	7.984	8.172	8.253	8.358	8.483
% Ch	9.3	4.4	5.3	5.5	9.7	4.0	5.2	6.1
Plus: Residence Adjustment	1.660	1.682	1.705	1.729	1.753	1.778	1.802	1.827
% Ch	5.6	5.6	5.6	5.6	5.7	5.7	5.7	5.7
Dividends/Int./Rent	25.431	25.711	25.996	26.287	26.763	27.079	27.464	27.847
% Ch	8.4	4.5	4.5	4.6	7.4	4.8	5.8	5.7
Transfer Payments	24.455	24.791	25.146	25.550	26.018	26.434	26.851	27.272
% Ch	7.4	5.6	5.8	6.6	7.5	6.5	6.5	6.4
State U.I. Benefits	0.843	0.851	0.869	0.885	0.902	0.917	0.931	0.944
% Ch	0.6	3.8	8.5	7.7	8.0	7.0	6.1	5.7
Other Transfers	23.611	23.940	24.277	24.665	25.116	25.516	25.920	26.328
% Ch	7.6	5.7	5.7	6.6	7.5	6.5	6.5	6.4

Table A3.5  
**Washington Personal Income by Component**  
 Historical Data

	1968	1969	1970	1971	1972	1973	1974	1975
Personal Income	12.062	13.665	14.310	15.067	16.298	18.437	20.886	23.400
% Ch	10.6	13.3	4.7	5.3	8.2	13.1	13.3	12.0
Total Wage and Salary Disbursements	8.215	9.014	9.176	9.384	10.045	11.275	12.622	14.018
% Ch	11.9	9.7	1.8	2.3	7.0	12.2	11.9	11.1
Manufacturing	2.406	2.550	2.291	2.116	2.331	2.698	3.043	3.284
% Ch	10.8	6.0	-10.2	-7.6	10.2	15.8	12.8	7.9
Nondurable Manufacturing	0.561	0.598	0.621	0.635	0.689	0.738	0.825	0.893
% Ch	7.3	6.6	3.9	2.2	8.4	7.2	11.8	8.2
Durable Manufacturing	1.845	1.952	1.669	1.481	1.643	1.960	2.218	2.391
% Ch	12.0	5.8	-14.5	-11.3	10.9	19.3	13.1	7.8
Nonmanufacturing	5.331	5.892	6.281	6.687	7.189	7.942	8.837	9.935
% Ch	12.1	10.5	6.6	6.5	7.5	10.5	11.3	12.4
Other Private Wages	0.029	0.035	0.037	0.041	0.047	0.061	0.065	0.074
% Ch	-1.7	23.7	4.1	11.4	14.6	31.0	5.7	14.0
Farm Wages	0.092	0.107	0.121	0.109	0.107	0.131	0.160	0.193
% Ch	7.0	15.8	13.6	-10.5	-1.4	22.8	21.4	20.8
Military Wages	0.357	0.429	0.446	0.431	0.371	0.441	0.517	0.532
% Ch	19.8	20.2	3.9	-3.3	-14.0	18.9	17.3	2.8
Nonwage Personal Income	3.847	4.651	5.135	5.683	6.253	7.163	8.264	9.383
% Ch	8.0	20.9	10.4	10.7	10.0	14.5	15.4	13.5
Other Labor Income	0.349	0.416	0.446	0.478	0.565	0.655	0.789	0.977
% Ch	19.9	19.4	7.2	7.2	18.2	15.9	20.4	23.9
Proprietor's Income	1.244	1.422	1.361	1.462	1.706	2.060	2.326	2.489
% Ch	2.8	14.3	-4.3	7.4	16.7	20.8	12.9	7.0
Farm	0.242	0.310	0.242	0.303	0.427	0.658	0.759	0.745
% Ch	0.5	28.5	-22.0	25.4	40.6	54.1	15.4	-1.9
Nonfarm	1.003	1.112	1.119	1.158	1.279	1.403	1.568	1.744
% Ch	3.3	10.9	0.7	3.5	10.4	9.7	11.8	11.2
Less: Pers. Cont. for Social Ins.	0.409	0.471	0.484	0.521	0.576	0.725	0.870	0.983
% Ch	11.2	15.1	2.9	7.6	10.6	25.8	20.1	13.0
Plus: Residence Adjustment	0.102	0.085	0.067	0.066	0.076	0.093	0.137	0.205
% Ch	14.0	-16.4	-20.8	-1.7	15.1	22.4	46.8	50.1
Dividends/Int./Rent	1.476	1.924	2.069	2.233	2.356	2.684	3.046	3.223
% Ch	7.2	30.3	7.6	7.9	5.5	13.9	13.5	5.8
Transfer Payments	1.086	1.275	1.675	1.965	2.126	2.395	2.837	3.472
% Ch	12.9	17.4	31.4	17.3	8.2	12.7	18.4	22.4
State U.I. Benefits	0.040	0.052	0.177	0.238	0.171	0.135	0.169	0.329
% Ch	3.3	31.6	239.8	34.6	-28.2	-21.0	25.1	94.9
Other Transfers	1.046	1.223	1.498	1.727	1.956	2.261	2.668	3.143
% Ch	13.3	16.9	22.5	15.3	13.2	15.6	18.0	17.8
Total Wage and Salary Disbursements	15.768	17.803	20.887	24.367	27.024	29.793	30.790	31.822
% Ch	12.5	12.9	17.3	16.7	10.9	10.2	3.3	3.4

Table A3.5  
**Washington Personal Income by Component**  
 Historical Data

	1976	1977	1978	1979	1980	1981	1982	1983
Personal Income	26.200	29.138	34.112	39.436	44.686	49.828	52.338	55.517
% Ch	12.0	11.2	17.1	15.6	13.3	11.5	5.0	6.1
Total Wage and Salary Disbursements	15.768	17.803	20.887	24.367	27.024	29.793	30.790	31.822
% Ch	12.5	12.9	17.3	16.7	10.9	10.2	3.3	3.4
Manufacturing	3.616	4.073	4.838	5.792	6.473	7.048	7.148	7.024
% Ch	10.1	12.6	18.8	19.7	11.8	8.9	1.4	-1.7
Nondurable Manufacturing	1.030	1.163	1.248	1.445	1.585	1.735	1.813	1.918
% Ch	15.4	12.9	7.3	15.8	9.7	9.5	4.5	5.8
Durable Manufacturing	2.585	2.910	3.590	4.347	4.888	5.312	5.336	5.106
% Ch	8.1	12.5	23.4	21.1	12.4	8.7	0.4	-4.3
Nonmanufacturing	11.254	12.826	15.046	17.506	19.366	21.406	22.120	23.230
% Ch	13.3	14.0	17.3	16.4	10.6	10.5	3.3	5.0
Other Private Wages	0.092	0.117	0.160	0.178	0.202	0.222	0.220	0.226
% Ch	24.8	26.9	36.3	11.3	13.5	10.2	-1.1	2.8
Farm Wages	0.251	0.220	0.240	0.266	0.282	0.280	0.336	0.325
% Ch	30.1	-12.4	9.0	11.2	5.7	-0.7	20.1	-3.1
Military Wages	0.555	0.568	0.604	0.625	0.701	0.838	0.966	1.016
% Ch	4.5	2.2	6.4	3.5	12.2	19.6	15.3	5.1
Nonwage Personal Income	10.432	11.335	13.225	15.069	17.662	20.035	21.548	23.695
% Ch	11.2	8.7	16.7	13.9	17.2	13.4	7.6	10.0
Other Labor Income	1.185	1.443	1.762	2.040	2.340	2.616	2.824	2.989
% Ch	21.3	21.7	22.1	15.7	14.7	11.8	8.0	5.8
Proprietor's Income	2.676	2.724	3.295	3.498	3.609	3.388	3.227	3.960
% Ch	7.5	1.8	20.9	6.2	3.2	-6.1	-4.7	22.7
Farm	0.521	0.404	0.553	0.516	0.622	0.595	0.450	0.761
% Ch	-30.1	-22.5	37.0	-6.6	20.5	-4.4	-24.3	68.9
Nonfarm	2.155	2.320	2.741	2.982	2.987	2.794	2.777	3.200
% Ch	23.6	7.7	18.2	8.8	0.2	-6.5	-0.6	15.2
Less: Pers. Cont. for Social Ins.	1.074	1.174	1.385	1.645	1.834	2.147	2.276	2.389
% Ch	9.2	9.4	17.9	18.8	11.5	17.1	6.0	5.0
Plus: Residence Adjustment	0.255	0.235	0.278	0.334	0.392	0.451	0.483	0.506
% Ch	24.3	-8.1	18.2	20.3	17.4	15.1	7.1	4.6
Dividends/Int./Rent	3.588	4.045	4.837	5.848	7.081	8.688	9.375	10.137
% Ch	11.3	12.7	19.6	20.9	21.1	22.7	7.9	8.1
Transfer Payments	3.802	4.063	4.438	4.995	6.074	7.038	7.915	8.493
% Ch	9.5	6.9	9.2	12.6	21.6	15.9	12.5	7.3
State U.I. Benefits	0.313	0.253	0.155	0.162	0.338	0.452	0.737	0.744
% Ch	-4.9	-19.0	-39.0	4.7	109.0	33.6	63.1	1.0
Other Transfers	3.489	3.809	4.284	4.834	5.735	6.586	7.178	7.748
% Ch	11.0	9.2	12.5	12.8	18.7	14.8	9.0	8.0

Table A3.5  
**Washington Personal Income by Component**  
 Historical Data

	1984	1985	1986	1987	1988	1989	1990	1991
Personal Income	59.630	63.508	68.042	72.252	78.263	86.345	95.981	102.386
% Ch	7.4	6.5	7.1	6.2	8.3	10.3	11.2	6.7
Total Wage and Salary Disbursements	33.651	35.799	38.336	41.165	44.663	48.875	54.179	57.983
% Ch	5.7	6.4	7.1	7.4	8.5	9.4	10.9	7.0
Manufacturing	7.548	7.993	8.714	9.124	10.003	11.030	11.866	11.730
% Ch	7.5	5.9	9.0	4.7	9.6	10.3	7.6	-1.2
Nondurable Manufacturing	2.043	2.172	2.264	2.380	2.571	2.764	3.026	2.820
% Ch	6.5	6.3	4.2	5.1	8.0	7.5	9.5	-6.8
Durable Manufacturing	5.504	5.821	6.450	6.744	7.432	8.265	8.840	8.910
% Ch	7.8	5.8	10.8	4.6	10.2	11.2	7.0	0.8
Nonmanufacturing	24.451	26.028	27.782	30.045	32.475	35.567	39.735	43.548
% Ch	5.3	6.4	6.7	8.1	8.1	9.5	11.7	9.6
Other Private Wages	0.241	0.272	0.327	0.380	0.447	0.482	0.589	0.646
% Ch	6.6	12.9	20.2	16.2	17.6	8.0	22.0	9.7
Farm Wages	0.327	0.334	0.314	0.318	0.375	0.411	0.501	0.502
% Ch	0.4	2.1	-6.0	1.3	17.9	9.7	21.7	0.2
Military Wages	1.084	1.172	1.200	1.298	1.364	1.384	1.489	1.557
% Ch	6.8	8.1	2.3	8.2	5.1	1.5	7.6	4.6
Nonwage Personal Income	25.979	27.709	29.705	31.087	33.600	37.470	41.801	44.403
% Ch	9.6	6.7	7.2	4.7	8.1	11.5	11.6	6.2
Other Labor Income	3.091	3.296	3.515	3.821	4.064	4.620	5.309	5.946
% Ch	3.4	6.6	6.6	8.7	6.3	13.7	14.9	12.0
Proprietor's Income	4.634	4.851	5.451	5.808	6.771	7.344	8.376	8.652
% Ch	17.0	4.7	12.4	6.6	16.6	8.5	14.0	3.3
Farm	0.743	0.441	0.771	0.760	0.587	0.657	0.601	0.663
% Ch	-2.4	-40.7	75.0	-1.4	-22.8	12.0	-8.6	10.4
Nonfarm	3.891	4.410	4.680	5.048	6.184	6.687	7.775	7.990
% Ch	21.6	13.3	6.1	7.9	22.5	8.1	16.3	2.8
Less: Pers. Cont. for Social Ins.	2.573	2.867	3.142	3.359	3.787	4.246	4.678	5.136
% Ch	7.7	11.4	9.6	6.9	12.7	12.1	10.2	9.8
Plus: Residence Adjustment	0.561	0.609	0.627	0.676	0.754	0.840	0.919	0.992
% Ch	11.0	8.5	3.0	7.8	11.6	11.3	9.4	7.9
Dividends/Int./Rent	11.293	12.032	12.892	13.317	14.214	16.280	17.909	18.227
% Ch	11.4	6.5	7.1	3.3	6.7	14.5	10.0	1.8
Transfer Payments	8.972	9.788	10.363	10.824	11.583	12.632	13.967	15.722
% Ch	5.6	9.1	5.9	4.4	7.0	9.1	10.6	12.6
State U.I. Benefits	0.498	0.474	0.429	0.404	0.390	0.381	0.441	0.654
% Ch	-33.1	-4.9	-9.5	-5.9	-3.4	-2.3	15.8	48.3
Other Transfers	8.474	9.314	9.934	10.420	11.194	12.251	13.526	15.068
% Ch	9.4	9.9	6.7	4.9	7.4	9.4	10.4	11.4



Table A4.1

**Selected Inflation Indicators**

	Price Deflator <sup>*</sup>		U.S. CPI <sup>#</sup>		Seattle CPI <sup>+</sup>	
	Index	Percent Change	Index	Percent Change	Index	Percent Change
1961	0.235	1.2	0.299	1.1	0.293	1.7
1962	0.237	1.1	0.303	1.2	0.298	1.5
1963	0.240	1.2	0.306	1.3	0.302	1.6
1964	0.243	1.4	0.310	1.3	0.306	1.3
1965	0.247	1.5	0.315	1.6	0.310	1.1
1966	0.253	2.5	0.325	3.0	0.319	3.0
1967	0.260	2.8	0.334	2.8	0.328	2.9
1968	0.270	3.9	0.348	4.2	0.342	4.1
1969	0.282	4.2	0.367	5.4	0.358	4.8
1970	0.295	4.7	0.388	5.9	0.374	4.5
1971	0.308	4.5	0.405	4.2	0.382	2.1
1972	0.319	3.5	0.418	3.3	0.393	2.9
1973	0.336	5.5	0.444	6.3	0.418	6.4
1974	0.371	10.2	0.493	11.0	0.464	11.0
1975	0.401	8.1	0.538	9.1	0.511	10.2
1976	0.423	5.7	0.569	5.8	0.540	5.5
1977	0.451	6.6	0.606	6.5	0.583	8.0
1978	0.484	7.3	0.652	7.6	0.640	9.9
1979	0.528	8.9	0.726	11.3	0.709	10.8
1980	0.585	10.9	0.824	13.5	0.827	16.7
1981	0.638	9.0	0.909	10.4	0.916	10.8
1982	0.674	5.7	0.965	6.2	0.978	6.7
1983	0.705	4.5	0.996	3.2	0.993	1.5
1984	0.731	3.8	1.039	4.4	1.030	3.8
1985	0.758	3.7	1.076	3.5	1.056	2.5
1986	0.780	2.9	1.097	1.9	1.066	1.0
1987	0.809	3.8	1.137	3.7	1.092	2.4
1988	0.843	4.2	1.183	4.1	1.128	3.3
1989	0.884	4.9	1.240	4.8	1.181	4.7
1990	0.929	5.1	1.308	5.4	1.268	7.3
1991	0.968	4.2	1.363	4.2	1.341	5.8
1992	1.000	3.3	1.404	3.0	1.390	3.7
1993	1.027	2.7	1.446	3.0	1.429	2.8
1994	1.051	2.4	1.483	2.6	1.478	3.4
1995	1.076	2.4	1.525	2.8	1.522	3.0
1996	1.099	2.1	1.570	2.9	1.575	3.4

**Forecast**

1997	1.123	2.2	1.611	2.7	1.632	3.6
1998	1.152	2.6	1.655	2.7	1.681	3.0
1999	1.184	2.8	1.705	3.0	1.738	3.4

\* Chain-Weight Implicit Price Deflator for Personal Consumption Expenditures, 1992=1.000.

# Consumer Price Index for all Urban Consumers, 1982-1984=1.000.

+ Consumer Price Index for the Seattle-Tacoma CMSA, 1982-1984=1.000.

Table A4.2

**Chain-Weighted Price Indices**

Calendar Years 1961 to 1999

	<b>Services</b>		<b>Food</b>		<b>Fuels</b>		<b>Gasoline</b>	
	Index	Percent Change	Index	Percent Change	Index	Percent Change	Index	Percent Change
1961	0.193	2.0	0.231	0.7	0.154	2.3	0.245	-0.9
1962	0.197	1.7	0.235	1.4	0.155	0.5	0.247	0.6
1963	0.200	1.5	0.238	1.4	0.158	1.9	0.246	-0.3
1964	0.203	1.5	0.242	1.9	0.156	-0.8	0.244	-0.7
1965	0.207	2.2	0.247	2.0	0.160	2.2	0.253	3.7
1966	0.213	2.9	0.258	4.3	0.164	2.7	0.260	2.6
1967	0.220	3.4	0.262	1.6	0.169	3.0	0.268	3.2
1968	0.230	4.3	0.271	3.7	0.174	2.8	0.272	1.5
1969	0.239	4.0	0.285	4.9	0.178	2.4	0.281	3.2
1970	0.252	5.5	0.301	5.9	0.185	4.1	0.284	1.0
1971	0.267	5.9	0.311	3.2	0.198	6.9	0.286	0.7
1972	0.279	4.4	0.325	4.5	0.200	0.8	0.289	1.2
1973	0.292	4.5	0.361	11.0	0.228	14.4	0.317	9.6
1974	0.314	7.7	0.411	14.1	0.362	58.5	0.428	35.1
1975	0.340	8.2	0.444	8.0	0.396	9.5	0.457	6.8
1976	0.365	7.4	0.458	3.1	0.423	6.8	0.476	4.2
1977	0.395	8.1	0.485	6.0	0.478	12.9	0.504	5.8
1978	0.426	8.0	0.530	9.3	0.502	5.1	0.526	4.4
1979	0.461	8.1	0.584	10.2	0.673	33.9	0.705	34.0
1980	0.510	10.6	0.636	8.9	0.937	39.2	0.979	38.8
1981	0.562	10.3	0.686	7.9	1.140	21.7	1.089	11.3
1982	0.608	8.2	0.713	3.8	1.127	-1.2	1.034	-5.1
1983	0.649	6.7	0.730	2.4	1.059	-6.0	1.001	-3.2
1984	0.682	5.1	0.757	3.7	1.084	2.3	0.986	-1.4
1985	0.716	5.1	0.775	2.4	1.046	-3.4	0.995	0.8
1986	0.753	5.1	0.800	3.2	0.844	-19.4	0.781	-21.5
1987	0.782	3.9	0.828	3.6	0.859	1.8	0.811	3.8
1988	0.822	5.1	0.859	3.8	0.861	0.3	0.818	0.9
1989	0.866	5.3	0.905	5.3	0.901	4.6	0.894	9.2
1990	0.912	5.4	0.951	5.1	1.078	19.7	1.018	13.9
1991	0.958	5.0	0.986	3.6	1.040	-3.5	1.005	-1.3
1992	1.000	4.4	1.000	1.4	1.000	-3.9	1.000	-0.5
1993	1.036	3.6	1.017	1.7	0.996	-0.4	0.991	-0.9
1994	1.067	3.0	1.039	2.1	0.980	-1.6	0.996	0.5
1995	1.099	3.0	1.064	2.5	0.973	-0.7	1.011	1.6
1996	1.128	2.6	1.097	3.1	1.089	12.0	1.068	5.6
Forecast								
1997	1.162	3.0	1.131	3.1	1.102	1.2	1.074	0.6
1998	1.201	3.4	1.159	2.5	1.009	-8.5	1.040	-3.2
1999	1.243	3.5	1.190	2.6	0.984	-2.4	1.042	0.2

Table A5.1  
**Total Resident Population and Components of Change** \*  
 1970-1999  
 (Thousands)

	Population	Change	Percent Change	Births	Deaths	Net Migration
1970	3413.3	16.3	0.5	59.9	30.0	-13.7
1971	3436.3	23.1	0.7	60.0	29.8	-7.2
1972	3430.3	-6.0	-0.2	53.1	30.4	-28.7
1973	3444.3	14.0	0.4	47.7	30.4	-3.3
1974	3508.7	64.4	1.9	48.2	29.9	46.2
1975	3567.9	59.2	1.7	50.1	30.3	39.4
1976	3634.9	67.0	1.9	51.4	30.2	45.8
1977	3715.4	80.5	2.2	54.2	29.1	55.4
1978	3836.2	120.8	3.3	57.3	30.4	94.0
1979	3979.2	143.0	3.7	60.2	30.2	113.0
1980	4132.4	153.2	3.8	65.4	31.3	119.1
1981	4229.3	96.9	2.3	68.2	31.8	60.6
1982	4276.5	47.3	1.1	70.1	31.7	8.9
1983	4307.2	30.7	0.7	69.5	32.5	-6.2
1984	4354.1	46.8	1.1	68.5	33.2	11.6
1985	4415.8	61.7	1.4	69.1	34.0	26.6
1986	4462.2	46.4	1.1	70.2	34.0	10.2
1987	4527.1	64.9	1.5	69.3	34.4	30.0
1988	4616.9	89.8	2.0	71.0	36.0	54.8
1989	4728.1	111.2	2.4	73.0	36.0	74.2
1990	4866.7	138.6	2.9	76.4	36.2	98.5
1991	5000.4	133.7	2.7	79.1	36.6	91.2
1992	5116.7	116.3	2.3	80.2	37.2	73.2
1993	5240.9	124.2	2.4	79.1	39.4	84.5
1994	5334.4	93.5	1.8	78.2	39.5	54.9
1995	5429.9	95.5	1.8	77.6	40.3	58.2
1996	5516.8	86.9	1.6	77.2	41.0	50.7
Forecast						
1997	5608.1	91.3	1.7	77.0	41.5	55.8
1998	5713.5	105.4	1.9	77.3	42.3	70.5
1999	5824.6	111.1	1.9	77.8	43.2	76.6

\* As of April 1 of Each Year

Source: Office of Financial Management

Table A5.2

**Washington Population\***  
(Thousands)

	<b>Estimated</b>			<b>Forecast</b>		
	1994	1995	1996	1997	1998	1999
Total Population	5334.4	5429.9	5516.8	5608.1	5713.5	5824.6
Percent Change	1.8	1.8	1.6	1.7	1.9	1.9
Age 17 and Under	1434.4	1463.9	1487.8	1510.6	1532.8	1554.1
Percent of Total	26.9	27.0	27.0	26.9	26.8	26.7
Age 6-18	1001.3	1031.2	1061.9	1091.7	1122.8	1146.5
Percent of Total	18.8	19.0	19.2	19.5	19.7	19.7
Age 18 and Over	3900.0	3966.0	4029.0	4097.5	4180.8	4270.5
Percent of Total	73.1	73.0	73.0	73.1	73.2	73.3
Age 21 and Over	3703.5	3763.4	3820.0	3880.6	3951.5	4027.7
Percent of Total	69.4	69.3	69.2	69.2	69.2	69.1
Age 20-34	1202.2	1188.5	1169.4	1162.7	1158.6	1161.2
Percent of Total	22.5	21.9	21.2	20.7	20.3	19.9
Age 18-64	3281.9	3338.7	3392.1	3454.2	3530.1	3612.7
Percent of Total	61.5	61.5	61.5	61.6	61.8	62.0
Age 65 and Over	618.1	627.4	636.9	643.3	650.7	657.8
Percent of Total	11.6	11.6	11.5	11.5	11.4	11.3

\* As of April 1 of Each Year

Source: Office of Financial Management

## Glossary

**Biennium:** The state's two years budget cycle. The current biennium (1995-1997) started on July 1, 1995 and ends June 30, 1997. The 1997-1999 biennium starts July 1, 1995 and ends June 30, 1997.

**Cash Basis:** Cash receipts received during a period. The Forecast Council forecasts revenues on a Cash and GAAP (Generally Accepted Accounting Principles) basis. The Cash forecast measures cash expected during a period.

**CPI:** The Consumer Price Index for All Urban Consumers. The Bureau of Labor Statistics (BLS) updates the CPI monthly, surveying over 60,000 goods in 85 urban areas. The BLS also produces a semi-annual Seattle-Tacoma CPI.

**Tax Elasticity:** A measure of how tax revenues respond to changes in personal income. If tax revenue elasticity is greater than one, a one percent change in personal income will be associated with more than a one percent increase in tax revenues. If elasticity is less than one, a one percent increase in personal income will be associated with less than a one percent increase in tax revenues.

**Fiscal Year:** The state's budget year. Washington State's fiscal year runs from July 1 through June 30. Fiscal year 1997, for example, runs from July 1, 1996 through June 30, 1997.

**GAAP Basis: Generally Accepted Accounting Principles** measure revenue in the period during which they accrue rather than the period in which they are received.

**General Fund:** Accounts for all financial resources and transactions not accounted for in another fund.

**General Fund-State Revenue:** Resources from state sources only, excludes federal monies.

**Implicit Price Deflator for Personal Consumption Expenditures (IPD):** The IPD is a by-product of the National Income and Product Accounts. It is derived by dividing current dollar (nominal) consumer expenditures by constant dollar (real) consumer expenditures.

**Mortgage Rate:** The average interest rates on 25 year conventional loan (as reported by the Federal Home Loan Bank Board).

**Non-Wage Income:** Personal income other than from wages and salaries. The major components are: proprietor's income, transfer payments, and dividends, interest and rent.

**Real GDP:** Gross Domestic Production adjusted for the price level.

**Personal Income:** Income from wages and salaries; other labor income; proprietor's income; dividends, interest and rent; transfer payments; and a residence adjustment. It is reduced by employee contributions for social insurance.

**Seasonally Adjusted:** Adjusted for normal seasonal variations. Monthly statistics, such as the unemployment rate, are seasonally adjusted to make month-to-month comparisons possible.

**Wage and Salary Employment:** Civilian nonfarm payroll employees. The self-employed, farm workers, members of the armed forces, private household employees, and workers on strike are excluded.

---

**Office of the Forecast Council  
State of Washington  
Post Office Box 40912**

**BULK RATE  
U.S. POSTAGE PAID  
Washington State**